

The Organization
and Administration of
PHYSICAL EDUCATION

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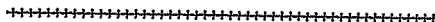
continually analyzed the pertinent administrative experiences of other teachers and administrators, and they have followed the increasingly extensive literature in this field. They have combined to conduct and to guide research projects in organization and administration and have incorporated the results of these studies into the first, the second, and now the third edition of this text. The fruits of these studies and experiences have been so abundant that the authors have felt impelled to rewrite large sections of the book in each of the last two editions. Almost half of this third edition has been completely revised.

The bibliography has been very carefully selected and classified by chapters so that the teacher may readily extend the course to any desired degree or find additional information where desired without extensive reading of books and articles not germane to the subject.

The result of this combination of experience, utilization of job analyses, and research is an eminently *practical* book, planned and written to answer the questions and to solve the problems of organization and administration encountered by the teacher of health and physical education, as well as to serve as a basis for more complete class investigations and discussions.

CHARLES H. McCLOY

PREFACE



This book considers the goal of physical education to be primarily education rather than health or exercise in themselves. Education in this sense includes education for fitness, for skills, as well as education for knowledges and for the development of qualities of personality and character. Although the authors believe that health education may be efficiently administered by the physical education department, they recognize that in some situations other departments may be better equipped to direct this work. The administration of health education will, of course, vary according to the size and organization of the particular school. For example, one university may have a medical school with a very active department of hygiene and public health directing the health education program. A high school or small college may have a department of home economics which because of its activity in the area of nutrition assumes major responsibility for health education. Other schools will have no department other than that of physical education giving attention to health education.

In planning the book, the authors' first task was to discover the basic problems in the organization and administration of physical education. These were ascertained by a study of physical education in the past and an observation of present trends, together with job analyses of physical education books and magazines and professional curricula in physical education. The next step was to provide information on the topics suggested by these analyses as most significant. This method of approach has resulted, we hope, in a balanced text, with no important phases of organization and administration

overlooked or underemphasized and no undue space devoted to the authors' particular hobbies or interests.

This book provides for discussion and consideration of the pertinent problems facing the administrator today. It is written not only as a text for class work but also for the teacher in charge of activities, for the administrator of physical education, and for the general administrator who might desire additional information concerning the significance of physical education in the educational scheme. Each author has written on those topics for which his training and research and his experience as teacher in elementary school, high school, college, and university have provided the most adequate information.

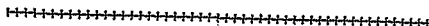
An attempt has been made to write largely from personal experience and research and to avoid, to any marked degree, summarizing opinions or providing abstracts in support of viewpoints presented. This was done in an attempt to increase the readability of the text rather than with any feeling that the resulting conclusions would differ radically from authoritative opinion in the field.

The authors are especially indebted to Dr. C. H. McCloy of the University of Iowa for his helpful suggestions and criticisms; to Dr. Eleanor Metheny for her suggestions and contribution regarding the duties of the secretary; to Dr. A. J. Wendler of the University of Iowa; and to Dr. Roland Rooks of the University of Iowa for his valuable assistance on the chapter on health education. They also wish to thank Mr. J. I. Meinen of Bradley University, Mr. J. P. Sabo, Dr. Walter Knox, Mr. Stanley Borgman, Dr. H. T. Frierwood, Miss Josephine Fiske, Mr. Walter Byers, Mr. A. O. Duer, Dr. R. E. Jamerson, Mr. Raymond B. Magwire, Dr. Harry A. Scott, Miss Ruth Wilson, and the many other colleagues and students who have assisted in the preparation of this book.

E.F.V.

A.A.E.

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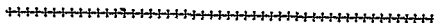
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The Organization
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The Place of Physical Education in Education



In establishing the position of physical education in the pattern of general education it is important to present in brief the role of physical education in the past, and to indicate in what way the purposes of physical education are in accord with, or contribute to, the goals of education. This will be done in the light of the present day philosophy of physical education as it is reflected in modern courses of study, in the significant writings in the field, and in the needs of physical education in our society.

Historical Background. From a brief review of the evidence of the past we shall see that the amount and type of physical education practiced by a people reflects its philosophy and frequently reveals the dominant purpose of the state.

Some people of the past who believed in subjugating the body as a means of elevating the soul discouraged enjoyable physical activity and, as a result, did very little toward developing a physical education program. However, the Egyptians, Babylonians, and Hebrews, with a higher regard for the physical, encouraged and engaged in numerous sports and, consequently, developed more extensive physical education programs.

Persia, under Cyrus, a dominant leader, revolted from Media about 558 B.C. Cyrus had a philosophy of conquest and a major purpose that physical education could serve. He needed soldiers who could fight well and who could take care of themselves on the march. Consequently, he took young boys at about the age of six and trained them in discipline, running, jumping, javelin throwing, mounting, riding, and other skills that would build more efficient

fighting men. To test and develop his troops, Cyrus held long hunts which were severe ordeals. Extended marches, little food, and meager protection from the elements characterized this phase of training. The education of boys stressed primarily the physical and moral aspects—those moral aspects that would make for better fighters. Since the girls were not needed as soldiers, their education was neglected. About two centuries later, a philosophy of ease coupled with corrupt practices led to a neglect of rigorous training and to a disregard for physical efficiency. This undermined the strength of Persia and, as a result, Alexander conquered her with ease.

The Spartans, somewhat after the time of Cyrus, had a philosophy and purpose similar to that of the Persians and developed the same type of physical education. The boys were taken by the state at about the age of seven, housed in barracks, and trained in those attitudes and forms of physical activity that made for stoic, rugged soldiers. Jumping, running, wrestling, throwing weights, and mimic dances of warfare were among the important physical activities. To provide more surely for strong fighting men, the weak and poorly formed babies were exposed to die. Spartan girls were trained physically so that they would become better mothers.

Athens had military needs comparable to those of Sparta and Persia, but had a somewhat different philosophy. Learning, beauty, and grace loomed larger in the picture of Athenian life; less rigor and more freedom was the standard for men. The physical education of women was given very little consideration. The physical activities were practically the same as those of Sparta, but additional aspects of performance were stressed. Beauty, grace, and sportsmanship were added to speed, courage, strength, and skill. This philosophy spread and made itself felt during Greek control of the Panhellenic games, the most noted of which were the Olympic games.

During the growth and rise of Rome as a world power hard work and physical exercise that prepared the youth for war were dictated by a philosophy of conquest. At the crest of its power, and especially during its decline, Rome was aflame with a desire to see blood. The physical activities of its great arenas reflected this desire. Dangerous chariot races, gladiatorial contests, beast baiting, miniature battles,

extremely rough fighting, and brutal ball games marked this epoch of Roman life.

The Dark Ages, with the revival of asceticism, produced a general lack of interest in physical activity. Centuries later Jahn, of Germany, used physical activity and its accompanying attitudes to build toward the great German goal of defeating France. Ling, of Sweden, saw in formal physical drill a means of improving the efficiency of the Swedish army. This fear of neighbors and the desire for conquest have been responsible for certain types of physical education down through the ages. Even England, with her island seclusion and the resulting protection which permitted more athletic games and less mass drill, outlawed golf at one time because it interfered with archery practice.

The Puritans and other early settlers in America, who had a great deal of work to do, frowned upon those types of play that did not consist of some work form. Wood-chopping contests, corn-husking contests, and rifle matches were popular. More recently, however, increased leisure, greater freedom of thought, and a philosophy of success have led to a variety of vigorous, competitive games in the United States not modeled after work forms. The depression, with its enforced leisure for millions, stimulated recreational center activities. The military draft figures for World War I disclosed numerous physical defects, and as a result many states enacted compulsory physical education laws. Although the intention was good, there is not much that additional physical education laws and activity courses can do to reduce defects of the type that cause draft rejection. Draft figures from World War II support this point.

We see, then, that the philosophy of a people, which is always formulated in part by its needs, determines both the form and the amount of its physical activity. Hence, it is important that we consider the organization and administration of those forms of physical activity that are in harmony with our present philosophy, for those are the forms with which we shall have to deal. Certain activities, formerly discouraged, are now important units in our physical education programs; others, once of major significance, are now of only minor concern. We must follow our educational philosophy, which is influenced considerably in its application by public opinion.

With What Are Organization and Administration Concerned? Sound organization and administration are concerned with

setting up or planning the total purposes and activities of the department or unit and carrying these out to the end that all important aspects involved are accomplished. Organization includes setting up the over-all pattern or plan, whereas administration deals with putting it into operation and keeping it functioning.

In the physical education department the major phases with which organization and administration deal are over-all policies, facilities and equipment, human relations, budgeting and finance, staff selection, programs of physical and academic activities, details of class and team management, publicity, student problems, and aims and objectives. These and additional aspects will be considered in subsequent chapters. It is desirable that the student at this stage realize that a course in organization and administration is a summary type of course which touches upon and re-emphasizes many phases of the program which have gone before and which ties together the entire offering in the field of physical education to give an overview of the whole departmental offering. In the whole process should be developed the viewpoint that the administrator who would accomplish his purposes best must act wisely, be friendly, strive to keep associates happy (both staff members and others with whom he deals), make decisions, be reliable and honest, have a good general understanding of the entire unit involved, and be willing to accept responsibility.

The Present Outlook. These are some of the outstanding elements in our philosophy that point to the wisdom of dealing with the organization and administration of certain phases of physical education, along with some of the topics they indicate as worthy of consideration:

fication standards for faculty members.

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| 5. Increased interest in the teaching of health. | 5. Health education. |
| 6. Greater national and local emphasis on providing more and better school facilities. | 6. Physical education plant. |
| 7. A marked interest in interschool athletics. | 7. Interschool athletics. |
| 8. More enthusiasm for athletics for all. | 8. Intramural athletics. |
| 9. A conviction that we must learn to do by doing, to lead by leading. | 9. Student leadership. |
| 10. Tendency to check more carefully on school expenditures. | 10. Budget making and finance. |
| 11. Greater concern about securing and maintaining safe, well-constructed, nice-appearing equipment. | 11. Purchase and care of equipment. |
| 12. Recognition of the value of maintaining friendly relations with the public. | 12. Public relations in physical education. |
| 13. Greater concern about the legal responsibilities involved in conducting a physical education program. | 13. Legal liability for injuries. |
| 14. More emphasis on efficient office procedure. | 14. Office management. |
| 15. Increased interest in national and local organizations and societies. | 15. Physical education organizations. |
| 16. Strong emphasis on research and evaluation of public performance. | 16. Tests and measurements in physical education. |

Major Topics to Be Considered. A survey of the courses dealing with organization and administration of physical education, and related subjects, in a number of the leading schools of physical education shows that the above topics are given marked consideration in many of them. Current writings in the field also emphasize the importance of the above topics in the area of organization and administration of physical education. Consequently, in the remainder of this book the following major topics will be considered in turn:

perfect system or machine will not function well without competent direction.

The Goals of Education. The seven objectives presented in *Cardinal Principles of Secondary Education*¹ are generally accepted as adequate goals of education. They are health, command of the fundamental processes, worthy home membership, vocation, citizenship, worthy use of leisure, and ethical character. A committee of leading educators appointed by the National Education Association in 1913 spent three years preparing this bulletin. Many years have passed since the bulletin appeared, and still the basic ideas of these objectives have not been replaced by others for the great mass of educators. However, some have altered them a little here or there to balance their own personal equation. Certain writers have over-emphasized particular phases; sporadic attacks have been launched from time to time by others; and many have expressed the same ideas in different terms; but these seven objectives still stand as adequate and acceptable goals of American education.

It is worth noting in this connection that the Educational Policies Commission,² an outstanding committee of the National Education Association, has this to say of the bulletin: "It is probably the most influential educational document issued in this country." The commission, in its *The Purposes of Education in American Democracy*, then goes on to restate or reclassify the objectives of education. This commission lists four major objectives: (1) The objective of self-realization, which covers in general the same area as covered by health, command of fundamental processes, worthy use of leisure, and ethical character of the seven cardinal principles group; (2) The objective of human relationship, which deals with members of the family and community group and is akin to worthy home membership, citizenship, and worthy use of leisure of the seven cardinal principles objectives; (3) The objective of economic efficiency, which covers in general the same area as vocational preparation and worthy home membership; and (4) The objective of civic responsibility, which is essentially the same as the objective of citizenship in the seven cardinal principles group.

Since physical education is a part of education, it has the same

¹ *Bureau of Education Bulletin* (1918), No. 35.

² Educational Policies Commission, *Purposes of Education in American Democracy* (Washington, D. C., National Education Association, 1938).

general goals. The closeness of this relationship can be shown by pointing out the numerous ways in which physical education contributes to these goals.

Major Contributions to Health. These contributions can be made to both physical and mental health. The proper functioning of the social life of the individual is considered under ethical character and citizenship. *Health* is considered as that condition, mental and physical, in which the individual is functionally well adjusted internally as concerns all body parts and externally as concerns his environment.

Physical exercise and development of the muscular system have furnished an incentive to develop the other body systems in the advance from the lower to the higher forms of life.³

In the amoeba, the simplest form of animal life, the one cell carries on all of the functions of the organism. Living in water, it gets nourishment by absorption from particles around which it wraps itself; in this process there is a secretion which helps digestion. Excretion is simply unfolding and moving away from the waste products remaining. As a means of locomotion it throws out a *pseudopodium* and rolls and drags itself over toward it; one piece is extended and the remainder of the cell then works over to it. Respiration is performed by absorbing oxygen from the water through the surface of the cell. There is no true circulation—the process is about like the diffusion of bluing in water. There is no known nervous system, but if the amoeba is properly stimulated it responds. Reproduction takes place by division of the cell into two; these two in turn divide to produce others.

The sponge, a slightly higher form of life, has specialized reproduction cells and a skeleton, but otherwise shows no great functional advance over the one-celled amoeba except in the combination of cells.

The hydra, a *coelenterate*, shows functional advancement in that it has crude muscles and nerves and gets nourishment from "outer surface" cells.

In the earthworm we note a marked advancement over the hydra in regard to functional systems. It has a co-ordinated *muscular system* which provides for locomotion. The energy necessary for

³ J. M. Tyler, *Growth and Education* (Boston, Houghton Mifflin, 1907).

even the relatively slow movement of the worm is immense as compared to the amount required in the life process of the practically immobile hydra. The extra muscle needed to move the worm about must be maintained during periods of inactivity as well as during times of action. The hydra not only does not need to provide the energy for appreciable motion but is entirely free from the task of supporting a muscle mass of any consequence. With this gradually increasing muscle mass, requiring proportionately more nourishment, the developing worm is faced by a great problem; some better method of securing food than taking it through the outer skin must be provided. The answer to this problem is the development of a digestive tract or long hollow tube with some secretory tubes along the sides of it—a marked advance toward a digestive system. The worm is divided into numerous small segments, united end to end. Each segment has two primitive kidneys for excretion, and the whole organism has an outlet for waste other than the body surface. A circulatory system is developed to carry food to the cells and waste products away from them. By no means the least important addition is the directing or nervous system, which controls and regulates all other systems. In the worm there are separate nodes for each section and a larger or more important ganglion in the head section. These various centers exhibit a rough kind of teamwork in action. A special reproductive unit is in evidence here too. Of those body systems that are primarily concerned with the individual's own life, the muscular system is the oldest and furnishes the main reason for the others' existence. However, the muscles existing in the earthworm compare only to our trunk and neck muscles; our other muscle groups came later.

This phylogenetic development might be traced on up the scale of life, showing how the various parts originated. The muscles comparable to our shoulder and hip muscles appeared at the time of the fish; those of the arms and legs at the amphibian stage; and so on until the development of the hand muscles, which first appeared in the primates. It must be remembered that although it came into being in a rudimentary form in the reptile, one of the very last regions to develop in its great complexity was the cerebral cortex, which developed almost concurrently with the nerves and centers controlling the limbs and the delicate hand co-ordinations.

The muscles and nerves that are phylogenetically old are larger, stronger, and less complex than those that are not so old. These large-muscle groups with their controlling nerves are called the *fundamental* groups in that they came first or are phylogenetically older and are basic units. Those structures and functions which developed later—the cortex, the smaller muscles of the arms and legs, and vocalization—are called the *accessory* groups, because they are developed later as structural and functional additions to the earlier *fundamental* units. It seems to be a rule in nature that an adequate functioning of the *fundamental* groups is essential to a proper functioning of the more recently added *accessory* structures. That is, long continued proper functioning of the cortex depends upon exercise of the large muscles, *particularly during the growing period.*

Before birth, ontogeny roughly repeats phylogeny as far as the physical organism is concerned. There is some small evidence of this trend after birth. The nervous system and the brain, however, develop relatively early, and growth of the various body parts is anything but uniform in progress; but when a system is started, it follows crudely the life history of the race. There is far less evidence of recapitulation after birth than before, for it is in attitudes, urges, and mental condition that the implied recapitulation takes place, and accurate evidence concerning attitude and urges is difficult to obtain. The hypothesis advanced here is not that the specific physical changes are marked or noticeable, but that the general plan is followed; that, since big muscle action has ushered in progress of the various organic systems in the racial past, the plan is still used for proper development of those systems during the individual's growth. *Nature discards very slowly the principles, constructions and devices that have, at some time, proven useful.*

Physical exercise and a great deal of it, is advocated as one of the necessary means of attaining a healthy development. The child who exercises plentifully becomes tired and will rest better; gets hungry and will eat more; has more need of oxygen, and breathes more deeply and more rapidly; has more waste content to be carried from the cells and needs more nourishment for the cells, causing increased circulation; all of these contribute their bit toward better elimination of waste. This concentration on the other functions of the body strengthens the higher and lower directing centers, which

are responsible for all action, but it does not require great action of the cortex.

This is as it should be, for in youth the cortex is not ready to respond to extreme demands. There are three fairly well differentiated stages of growth gradually leading from the first to the last; pure growth, developmental growth, and approaching maturity. During the period of *pure growth*, which is almost entirely an increase in mass, practically no exercise is needed. About all of the body parts except the cortex and some of the accessory muscles have passed through that stage at birth, and are ready for *developmental growth*, which should include increase in both mass and function but should not undergo intense exercise. The cortex is still so close to the pure growth stage for some time that only a small amount of exercise is needed. Any effort to improve upon the original plan and rush the developmental process is apt to produce harmful results, in terms of chorea, nervousness, and similar disturbances. Experimenters have used tadpoles in testing out the proposal that nature can be hurried along. Since the tail is absorbed to be replaced by hind legs, anyway, the tails of some were cut off in an effort to hurry the appearance of the hind legs. The hind legs did develop sooner than in the nonmutilated tadpoles, but they were deformed. The penalty for violation of the general developmental principle was deformity. This experiment offers guiding advice to those who would neglect the physical and rush mental development. The third stage of growth is that of *approaching maturity* when marked activity is necessary to finish off properly the functional growth of the various parts. In general, the large-muscle groups are one stage ahead of the cortex and of the accessory groups in terms of development. In case of any doubt, it is safe to allow and advise additional physical, and less cortical, activity during childhood. Our present generation is nervous and unsettled. What can be expected of the next if concentration on cortical activity crowds out still more of the physical?

This line of reasoning can be advanced one step further. The other body systems still depend upon the action of those same muscle groups for stimulation to proper functioning during adult life. However, the amount of exercise required is much less than was needed in the first few years of life. This reduction in amount of required exercise has been taking place gradually. As the cortex

reaches the more advanced stages of growth, it can stand more exercise and consequently should have more. In adult life, or even earlier, it has completed the period of developmental growth and more of the time of education can be devoted to "mental pursuits." This does not mean that physical activity is no longer necessary but, rather, that the body needs proportionately less exercise as age advances. Those who have neglected the physical and concentrated on the mental have suffered.

It is the office workers and other men who use their cortex and finer hand muscles to the neglect of the large-muscle groups who have nervous breakdowns, rather than the day laborer, who exercises chiefly his large-muscle groups. These phylogenetically young members of the total body equipment, the interpretative and emotional controls of the cortex, and the fine hand co-ordinations, are the weaker ones in terms of stability and endurance. They are the ones that give way first in the presence of sudden, immediate strain and also under long continued strain. Exercise of the older groups seems to build up strength in the new or to recharge them. The human system may be likened to a motor vehicle in regard to certain functional purposes, provided the analogy is not pressed too far: let the engine, or motive power, represent the large-muscle groups, and the battery, with its control over the lights and starter, represent the cortex. Assuming normal functioning conditions, then long driving or use of the engine charges the battery, strengthens the starter, and furnishes plenty of electricity for the lights. Suppose, however, that the lights are left on and the engine is started often but very little driving is done. After a time the battery will not be strong enough to start the engine and the lights will be dim. It is much the same with college students who neglect the physical in an effort to concentrate upon the mental. The average undergraduate does not suffer much, but the graduate student who is convinced that since he is a man in the realm of academic advancement he must put away many of the childish things of the undergraduate, including exercise, is very apt to suffer. Hence we conclude that physical education contributes to physical and mental health through the use of the fundamental muscles, which stimulate action of the other body systems and tend to "charge the cortical battery."

\ Physical education contributes in other ways also. School children need some joyous excitement and will have it. Activity can substitute

for dissipation, delinquency, and carousing by giving youngsters something interesting to do. Free time, once spent on playgrounds, on hikes, in gymnasiums, or in other areas of physical activity, is used up and hence cannot be spent in some unfavorable environment. The evidence indicates that juvenile delinquency decreases as supervised play areas increase in number. Team games provide an excellent means of keeping certain youngsters' mind off sex matters. Especially at the adolescent age there is much dreaming and planning about things that appeal. In many unfortunate cases this centers around sex. With adequate direction, the team and its success can become the center of plans, dreams, and activity; and, thanks to the much maligned coach, they often do! Then, too, vigorous play tires the growing boy, and his bed becomes a place for sleep rather than one for *sleep and day dreaming*.

Students acquire sound habits only by practice, not by reading or hearing about them. Athletics, a large part of physical education, contributes well to health in this respect. In order that the individual may be a better player now, or at some time in the future, he will gladly practice health habits. He will avoid some stimulants and poisons, establish regular and sufficient hours of sleep and rest, select more carefully the foods he eats, and, in general, practice better habits of living.

We must never forget the value of play as mental relaxation. It takes the youngster's mind off his worries and troubles; it provides a change in the emphasis of his concentration. Something new and vital to think about provides mental rest just as change of occupation provides physical rest. When we realize that one half of the hospital beds in the United States are occupied by mental cases, the importance of the mental aspect of health becomes readily apparent.

During adolescence especially, but during youth generally, there are emotional stresses and strains brought on by the conflicts between one's own plans and actions and the plans and actions of others. This emotional tension, flavored with anger, fear, and the other strong emotions, provides increased internal secretions of adrenalin and the like. It is better to work off these products normally through vigorous activity than it is to force the vital organs to make the adjustment of returning to the normal condition without the aid of such big-muscle activity.

There is relatively clear evidence to the effect that exercise carried to the extent of marked fatigue leaves an individual more susceptible to certain diseases than he would have been without the exercise. However, competent physical educators discourage the practice of exercising to the point of extreme fatigue just as they do other excesses. The loss of resistance to infection is partially compensated for by the fact that regular, adequate exercise builds one up to the place where he is less readily fatigued. Then, when emergencies arise which demand an extra output of physical activity, he will be less fatigued than he would have been had he not built up his endurance. By practice the threshold of fatigue can be raised through developing greater endurance.

Contribution to the Attainment of Fundamental Processes.

The point here is to support the contention that there are "fundamental processes" in physical education; once this is established it is readily apparent that physical education contributes to their attainment. Those fundamental processes are the physical skills common to America in general and to one's own locality in particular. They are *fundamental* chiefly because the child needs them now for happy living, but also because future physical education endeavors and many life occupations are based upon them. As was pointed out before, children live on a different level from that of adults. In play situations the good performer is the hero and the poor performer is pushed into the background. Much of child life is play life, and a large share of it deals with physical skills; whereas only a small part of adult life is play, and good performance is not stressed so much. If an adult loses at golf or does poorly in a ball game at a picnic, it matters little, for success in those areas is not particularly vital; there are many other things that influence happiness so much more. The child does not have those numerous other phases of endeavor to which he can turn for success if he fails miserably in his physical skills. He must master the fundamental processes or suffer the consequences of loss of standing and recognition among his fellows in one of the major fields of youthful endeavor. That is one of life's most severe punishments, and it can be avoided by improving physical abilities. Many unhappy, insignificant boys have become leaders in their schools because of improvement in their fundamental skills.

Whether boys and girls go on to college or into other walks of life, training in the fundamental skills is necessary. It is unpleasant and unprofitable to remain below the grammar school level in the matter of physical skills during adolescence and early maturity. Those who do remain there miss as much of the joy that come with living a full life as do those who remain below the elementary school level in the attainment of the other fundamental processes. School athletics and leisure-time sports activities demand a thorough grounding in the fundamental physical activities and skills. Certainly physical education contributes largely to the attainment of an adequate command of many of the important fundamental educational processes.

Contribution to Ethical Character, Worthy Home Membership, and Good Citizenship. Since many of the qualities that make for achievement in any one of the above provide for achievement in the other two, the three are grouped together. Health, which helps to a larger degree in attaining worthy home membership and citizenship and less in attaining ethical character, is an exception worth noting.

Physical education is one phase of school work that lends itself particularly to the development of character. Student interest prevails, activity is predominant, and relatively great authority and respect are accorded those in charge. The physical education class provides more than just a place to discuss character education theory; it furnishes a laboratory for actual practice. We develop character much more surely by living it out than we do by hearing about what should be done or should not be done. It is one matter to decide upon the correct response to a tense situation when merely looking on, and an entirely different proposition to decide and act correctly when in the midst of heated combat. One contestant may foul another, unnoticed by the official, near the end of a close game and thus prevent an opportunity to score. The player fouled cannot take his ensuing action under advisement and decide some time later what to do about it. He must decide at once and give his answer immediately by what he does. This splendid educational laboratory demands actual responses to tense situations just as much as life in general does. The whole setup provides real rewards and punishments which with proper guidance will serve to encourage sportsmanship, co-operation, sociability, self-control,

involved should also carry over to similar home and community situations.

Some of the skills learned contribute to worthy home membership and citizenship as well as they do to command of the fundamental processes. Other things being equal, the more skillful home member is more worthy than the less skillful one.

Contribution to the Worthy Use of Leisure. Within the last 30 years, the hours of labor for children and adults have been drastically reduced. Many informed people predict further reduction. Whether or not this anticipated reduction comes to pass, there is a vast amount of leisure time to be spent now; much more than ever before in the history of this country. It is not during the hours of labor that unsocial conduct develops but in the hours of relaxation and freedom. Since it is during free or play time that those who enter crime prepare for that regrettable adventure, steps must be taken to employ that time more profitably. It is to this phase of guidance and development that physical education is eminently qualified to contribute. It provides a means of interesting, active, and constructive adventure instead of an approach to unsocial conduct. Inherently youth desires physical activity, competition, co-operation, fellowship, and many of the other elements in our program. It is well to note that adequate provision for the leisure time of adolescents is more important than is the preparation for their leisure time when they will be adults. If the problem is adequately administered in youth, there will be little cause for anxiety about it during the time of adult life.

It is a mistake, then, to criticize many of our more vigorous team games on the count that they do not provide carry-over activities for later life; they do not need to do that in order to justify themselves for they serve the cause of leisure time right now. In meeting the leisure needs of youth, they may render a greater service than those less vigorous games which carry over into adult life. One reason for this lies in the fact that children have much more free time than adults: the greater need offers the greater opportunity for service. Another reason which has been touched upon above, is that proper training and correct habit formation in youth may carry over into adult life. Adult habits cannot revert to a youth that is past. It is most valuable to occupy the leisure hours and days of youth harmlessly and constructively. Since team games attract

strongly, they have the power to pull youngsters to them who might not be attracted otherwise. To be sure, our games that have carry-over value as entire games into adult life need to be included among the physical activities of adolescents, but they must not be used to the exclusion of the more vigorous team games. It may even be possible that one will grow tired of a game that is made to serve regularly for both youth and adulthood. Since we have so generally accepted tennis, golf, skating, swimming, handball, and other sports of that nature as valuable units in a program that purports both to provide and to prepare for leisure time, they need not be defended here.

Physical education is not presented as the only unit in the school system that contributes to the worthy use of leisure but as one of the important units that has a significant contribution to make, both during the school age and later in life.

Contribution to Vocational Preparation. Better physical and mental health, character, and citizenship will aid one in securing and maintaining employment. The endurance, strength, and skills developed in physical activities increase one's efficiency in many types of work. Certain types of physical activity, notably athletic games, develop leadership and poise. These are always vocationally valuable. Studies spaced over the past 25 years tend to show that those who won letters on varsity athletic teams in colleges and universities have had greater success in life, measured in terms of financial and social achievements, than did their classmates who were not letter winners in sports. This is to be expected, since the letter winners had more directed or guided opportunities through which to pursue the total objectives of education than did the remainder of the student bodies from their respective institutions.

The skills and knowledge gained through participation in physical education are of direct economic value to certain groups of people. Many people today make their living by teaching and coaching physical activities; others by officiating; and still others by actually playing the games. Those individuals who are able to coach or teach physical education as well as other school subjects find it easier to secure positions as teachers and, when they are placed, receive better wages in proportion to their academic preparation and experience than they otherwise would. The increased demand for recreation and playground directors provides another vocational advantage

for people with adequate physical education experience. Through this means of education many are prepared in part for some full-time or part-time vocation.

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as controlling anger. *Items* are component parts of a subobjective, such as controlling anger when the official calls a foul on one.

Method of Attack. In developing adequate aims and objectives a comprehensive list of aims, objectives, subobjectives, and, in some cases, even items was compiled and classified, with the various categories under the respective headings toward the attainment of which they could be expected to make a significant contribution. The objectives and subobjectives were subjected in turn to criteria developed from the related fields and the goals of education and then notated as to whether they satisfied or failed to satisfy the condition stated in each criterion or goal. It became apparent that inclusion of subobjectives and items would add greatly to detail and confusion rather than to clarity. Consequently, the objectives with the aims under which they appear were used. Those judged as meeting the criteria and goals adequately are listed as the aims and objectives of physical education (see Appendix A for details concerning manner of selection). The objectives selected are ranked in two groups: those most worthy of general pursuit and those less worthy of general pursuit, according to the number of criteria and goals they meet satisfactorily.

Fundamental Limitations of Objectives. Objectives are to apply at the most suitable time. It is apparent that not all objectives apply equally to all ages of a student or to all students. The first-grade pupil should not be expected to concentrate on teamwork, which, however, is one of the important subobjectives for the high school group. Increased self-expression need not be stressed in the student who is already a nuisance because of an overdeveloped urge to be a performer, both vocally and physically. However, in the case of the overtimid child a greater desire for expression is needed. Individual differences must be considered but cannot be provided for in detail in setting up general objectives, for that would require a set of objectives for each individual. Actually, good instruction varies enough from the established objectives to make the desirable adjustments in practice, even though the general setup cannot provide a list for each student.

A useful distinction has been pointed out by many authors between objectives to be definitely pursued now, those that are also valuable but incidental to the main drive at present, and those that will be of value later on. Improvement of co-ordination is one of

the first type. During the time that instruction is being offered in skills that will help to improve co-ordination, the individual might well be instructed in social values, such as sportsmanship and self-control. By proper selection of activity it is possible to build toward a more remote objective, that of development of a leisure-time activity. In teaching the game of tennis, a physical activity, the three objectives above, along with many others, should prevail in the mind of the instructor. As the student is learning eye-hand co-ordination in striking the ball, he can very well learn to refrain from objecting to decisions of those officiating at the practice games and from displaying temper at the strokes he misses. As he improves his game he is developing a leisure-time activity for the present and for later years. The attainment of many objectives, even of different types, proceeds concurrently. Since certain goals may be decidedly worth attaining in childhood, others later on, and still others in adult life, *the objectives here considered are judged on the basis of the time when they apply best—in the instance of their optimum value.* Any objective that does not apply at all in school, needs to have a very strong case made for it in order to justify its pursuit there, and those objectives that apply very well in school should be retained unless an extremely strong case can be built against them on other grounds.

It must be remembered that the objectives listed are not supposed to be attained entirely through physical education. Physical education is considered as contributing only in part to them. In the matter of normal growth and development, which certainly is one concern of physical education, many other influences than those brought to bear in a physical education class are very important. Sleep, rest, sanitary conditions at home and at school, occupation before and after school, the amount and kind of food, and inheritance set the rate and direction very largely. Physical education can only do the best possible under the limitations placed upon it in this and other respects. In some cases greater opportunity for service is provided because of proportionately greater lack in the remainder of the child's environment. *Physical education, then, is one of the influences contributing to the objectives set up; it could not be otherwise, since the individual is touched only at intervals and often for only short periods, by organized physical education in schools.*

Criteria for Selecting Objectives. Objectives should be in accord with significant facts and strong hypotheses in fields closely related to physical education. Those related fields are zoology, sociology, psychology (including transfer of training), and education. Criteria are presented from these fields for the convenience of any who may wish to evaluate their own objectives or to check those presented here. For the purpose of subjecting the objectives to the criteria, in many instances a completion sentence, with a blank space in which to place the objective concerned is provided, for thus the points of issue seem to stand out more clearly. In some cases such sentences do not seem to be of particular value and, consequently, are not employed. When used, the completion sentence appears immediately after the criterion concerned.

ZOOLOGICAL CRITERIA

I. The objectives and their attainment should fit in with nature's plan concerning the physical organism.

A. The objectives should stress action of the large muscles since phylogenic development of the large-muscle groups furnished the incentive and reason for development of the other organic systems.

1. During ontogenetic development a large amount of exercise of these groups is essential to healthy functioning of other organs.

2. The other systems still depend upon action of those same muscle groups for proper functioning during adult life.

. stresses action of the larger muscles.

B. The objectives should stress proper organic functioning since proper muscular functioning depends upon proper organic functioning which it stimulates.

. stresses proper organic functioning.

C. The objectives should provide opportunity to work off the internal secretions produced during strong emotional states, since when strong emotions are aroused, and they often are in youth, opportunity to express them in action benefits the body and lack of such expression harms it.

. provides opportunity to work off the internal secretions produced during strong emotions.

D. Probably the objective should not be conducive to abnormal development of any body part, since there is danger in greatly exceeding normal development of any body part.

. is not conducive to abnormal development of any body part.

PHYSICAL EDUCATION

SOCIOLOGICAL CRITERIA

- I. The attained objective should be conducive to success in group living. It should contribute to success in a society organized in such a way as ours.
 - A. The objective should fit in with the predominant social restraints.
. fits in with the predominant social restraints.
 - B. The objective should emphasize the character traits accepted as valuable in our society.
. emphasizes the character traits accepted as valuable in our society.
 - C. The objectives should emphasize the physical traits accepted as valuable in our society.
. emphasizes the physical traits accepted as valuable in our society.
 - D. The objective should emphasize the mental traits accepted as valuable in America.
. emphasizes the mental traits accepted as valuable in America.
 - E. Other things being equal, those objectives that can be attained through social contacts in physical education are to be preferred.
. lends itself readily to attainment through social contacts in physical education.

PSYCHOLOGICAL CRITERIA

- I. The objective to be of value must be attainable through some mechanism with which the human body is provided.
. can be obtained through some mechanism with which the human body is provided.
- II. The objective to be of value must be such that progress toward its attainment is possible.
Progress toward the attainment of is possible.
 Criteria of efficient learning:
 - III. The objective will be attained more readily if the steps in its attainment are interesting.
. can be attained readily for it lends itself to interesting presentation.
 - IV. The objective will be attained more readily if provision can be made for correct repetition of the elements that comprise it. Correct practice includes:
 - A. Avoidance of errors.
 - B. Clear identification of connections to be made.
 - C. Provision for maturation.
 - D. Proper fusion of the elements.

... can be attained readily for it lends itself favorably to correct repetition of the elements comprising it.

V. The objective will be attained more readily if practice of the elements comprising it is satisfying. Satisfaction is increased by:

- A. Facility of tie-up with intensive universal drives.
- B. Presence of favorable and absence of contrary emotional drives.
- C. Clear conception and acceptance of the purpose.
- D. Practice in the absence of marked fatigue.

... can be attained readily for practice of its elements can readily be made satisfying.

VI. The objective will be attained more readily if it is possible to take into account and provide for individual differences in establishing the elements of which it is comprised.

... can be attained readily, for it is possible to take into account and provide for individual differences in establishing the elements of which it is comprised.

VII. The objective will be attained more readily if certain elements of it can be selected and stressed at favorable times.

... can be attained readily because certain elements of it can be selected and stressed at favorable times.

TRANSFER CRITERIA

I. The objective will be of greater value if it is such that provision can be made for efficient transfer to other situations.

- A. Generalizations that have future as well as present carry-over value should be used as basis of transfer.
- B. Ideas, skills, habits, and attitudes may well be included as of transfer value.
- C. Possible negative transfers should be avoided.
- D. The more intense the situation the better the transfer possibilities.

A corollary statement of the major criterion of transfer might well be added in conclusion: the unit of transfer should not be a minute detail or an extremely complex group of generalizations but a simple generalization of a group of details.

EDUCATIONAL CRITERION AND GOALS

There is one major criterion:

I. The objectives must fit in with the generally accepted aims or goals of education. The question asked of all objectives and subobjectives concerning each of the following seven goals is: Does . . . assist in attaining this goal?

that the students will achieve the objectives more generally if the instructor lives or practices them, each teacher will demonstrate them in attitude and action starting with the first meeting of the class. For instance, at the first meeting of the class (boys or girls) at the beginning of the spring semester, the activity to be considered is basketball. If this is a new class for the instructor, there will be among other things roll taking, preliminary getting acquainted with each other, some instructions concerning procedures, probably locker assignments, and appointments for medical exams for any who need one at this time. In this first organizing meeting pursuit of the objectives should be put into operation by the instructor, especially through demonstrating them by the way things are done. *Positive active qualities and qualities of efficiency* should be much in evidence. This will make for well-organized procedure and doing things with dispatch, as contrasted to disorganization and hesitation. Some knowledge should be dispensed concerning *proper health procedure as related to physical exercise*. This may be done in the form of advice concerning warmup, taking showers, wearing proper activity clothes, and excuses from activity when ill with a cold. The instructor can demonstrate, among other qualities, *sociability and leadership* in the manner used in dealing with the students. If class leaders are to be used, the method of selection can be put into operation. By providing summary essentials of playing rules the process of *attaining knowledge of rules* can get underway.

At the second meeting when the class is dressed for activity the objectives listed above are pursued along with several additional ones among which are samplings of the various objectives under *skills and abilities* aim. There will be development of *psychomotor skills* and proper development of *special senses with body movement* in eye-hand co-ordination as well as in the touch and feel of the ball in catching, passing, and shooting. Certainly there will be development of *skills common to America generally*, for basketball is truly an American game. There will be further development of *natural racial activities* in throwing, jumping, running, and dodging, and, of course, excellent opportunities to develop *general bodily control* in the pivoting, stopping, starting, and changing of direction in the drills. Here, too, is to be found *preparation for leisure time*, for basketball is one of the major leisure-time activities for our young people. The process of *improving morale through improving the*

body will also get underway as the activity adds to the conditioning of the participant. In this first activity meeting and in subsequent class sessions, the interest in and the fun of playing the game will help *eliminate or diminish worry through appropriate interest in physical activity* in that the participant will get lost in the game—that is, get lost from worries and problems which were built up in other areas. There will also be an *increase in general neural vigor*, for neural vigor is increased through action of the large-muscle groups. Strong nerves are based on strong muscles, which are developed through adequate exercise. Basketball provides background preparation for *spending a portion of one's leisure time in an enjoyable physical activity*, for basketball is a popular game, which, like other games, is enjoyable only if enough ability is developed to perform the various skills acceptably. A well-taught class will do this. In maintaining a clean activity area, clean uniforms, and in taking a shower after exercise, *acquiring the habit of cleanliness* is developed. From the purely physical angle basketball participation makes a definite contribution to development of *endurance and strength*. This presupposes a well-conducted class wherein all able students get a good workout each class period. This will be enhanced by an adequate supply of balls (probably a dozen at the first several meetings) and maximum use of facilities. Along with the personality objectives presented above, *sportsmanship, self-control, and positive mental qualities* are developed in the give and take and the enthusiasm and drive necessary in playing the game.

Basketball and the other activities suggested make their contribution, although but a minor one, to *normal growth and development and sound and proper functioning* of the students. As pointed out earlier in the chapter, physical activity is only one of the contributing factors to these two objectives, and, since only a small percentage of the total physical activity of junior high school students is gained in physical education classes, the contribution to the objectives must of necessity be limited. It is evident that *knowledge of techniques and methods* should be gained by all who participate in a well-taught class.

co-ordination of the sense of hearing with bodily movements in folk dancing, for example, than there is in stunts; there is also greater opportunity to prepare for *use of leisure time* than there is in track and field. However, a track meet with another school can make a greater contribution to the *promotion of school spirit* than can a folk-dance festival, which, in turn, can contribute successfully to *social co-operation*. Such objectives as *promotion of school spirit*, *presenting interesting performances or shows*, and *advertising the school* are pursued quite generally during the preparation for and presentation of activities for parents' night and other exhibitions. Folk dances, stunts, demonstrations of basketball games, and basketball lead-up games are useful units of such performances. Although these performances are not given during physical education class meetings, the basic skills and general preparation are taught and developed in connection with class work.

By the manner in which the class is taught, by the guidance provided by the instructor, and by the practices and attitude of the instructor some of the students should discover the value of *establishing a schedule of daily activities that fit their own beings*. Since this is a difficult problem for many adults as well as students, it is not proposed that participation in a physical education class will bring about a revolution in the lives of the students, but rather that some progress can be made in this area if the class is well conducted. Although *first aid* should probably be taught in a course designed especially for that purpose, the instructor can demonstrate correct first-aid practices as he meets the first-aid problems that arise in his activity class from time to time. He may even use such first-aid situations to point out some of the undesirable procedures that should be avoided.

The above illustrations present but a brief account of some of the ways that objectives are related to the activities which contribute to their attainment. They are presented for the use of those who might be concerned about just how the objectives listed tie in with actual class instruction. With other age groups, both younger and older, the different objectives will be given varying emphasis and attention. Individual instructors will also wish to place different emphasis on the various objectives. However, pursuit of all of the objectives should be practiced at all age levels.

The Aims and Objectives of Physical Education. These are the aims and objectives of physical education, classified into two groups on the basis of worthiness of general pursuit.

Those most worthy of general pursuit include:

1. *Skills and abilities aim*

Development of psychomotor skills.

Development of proper co-ordination of special senses with body movement.

Development of skills related to natural, racial activities.

Development of general bodily control.

Development of skills common to America generally and to one's own locality particularly.

2. *Cultural aim*

Development of understanding and appreciation of the techniques and strategies of sports.

Preparation for leisure time.

Improvement of morale through improving body.

3. *Mental hygiene aim*

Eliminating or diminishing worry and stress, through developing appropriate interests and habits of engaging in exercise and sports.

Increasing general neural vigor.

4. *Desirable habits aim*

Establishment of a schedule of daily activities that fits one's own being.

Acquiring the habit of spending a portion of one's leisure time in enjoyable physical activity.

Acquiring the habit of cleanliness.

5. *Purely physical aim*

To assist in the development of endurance sufficient to meet the needs of the stress of life and a little bit more.

To assist in developing strength enough to do normal life tasks without undue strain.

To assist in providing for normal growth and development.

6. *Personality aim*

Attainment of sportsmanship.

Attainment of leadership.

Attainment of positive active qualities.

Attainment of positive mental qualities.

Attainment of self-control.

Attainment of social co-operation.

Attainment of qualities of efficiency.

Attainment of sociability.

7. *Prestige aim*

Promotion of school spirit.

8. *Applied knowledge aim*

Attainment of knowledge of proper health procedure as related to physical exercise.

Those less worthy of general pursuit are:

1. *Purely physical aim*

To assist in developing and maintaining sound and proper functioning.

2. *Prestige aim*

Presenting interesting performances or shows.

Advertising school or institution.

3. *Applied knowledge aim*

Attainment of knowledge or rules.

Attainment of knowledge of techniques and methods.

Attainment of knowledge of first aid.

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Administrative Policies and Activities

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The Need of Established Policies. Any department that is to function adequately must have sound, well-established administrative policies, or guiding rules, as a basis on which to operate. Policies, unlike objectives, usually indicate the method of approach or means of procedure rather than the point to be gained. It is not enough to struggle along solving problems as they arise. Conditions may make it possible to go through the motions of conducting a department by this resort to lame expedients, but sound administration demands a positive, planned procedure rather than a floundering makeshift. It is essential that all staff members, as well as the director, know the policies which are to serve as guides. Staff friction often arises because there is a difference of opinion regarding authority and responsibility or accepted procedure. When all persons concerned know that one way rather than another is the accepted method of procedure, conflicts between two reasonably sound courses of action will be reduced to a minimum.

It should be evident to any student of administration that local conditions will influence policies, and that under certain circumstances administrative policies will be called for which differ materially from equally sound policies found applicable under other conditions. The policies presented below and discussed at length later in this chapter purport to cover the field adequately but not to condemn similar fundamental ideas stated in a different manner. Although presented from the viewpoint of a larger departmental organization, the following policies can be modified without much difficulty to apply to smaller schools. It is readily apparent that a

number of the policies do not apply in situations where one member constitutes the entire department. Generally, administrative problems increase as the size of the department increases, or, starting with a large department, decrease as the department decreases in size. This means fewer policies for smaller departments. Policies are developed through experience of both the policy maker and others. In any case, trial application in the local situation may eliminate, modify, or establish prospective policies.

Guiding Policies. There are six major policies under which are grouped the more specific explanatory policies. The director should:

1. *Insofar as possible operate on the basis of facts.*
 - (a) Before setting up a policy, secure the facts which will provide a defensible basis.
 - (b) When he performs an executive act, take steps immediately to collect facts which will enable him to appraise the effect of the act.
 - (c) Ask for support of a policy only if facts point toward the desirability of the procedure; one should not ask for support on a personal basis.
2. *Be just to his staff.*
 - (a) Reward and encourage the contribution of ideas and service by the staff.
 - (b) Require all members to be qualified for their positions.
 - (c) Stress staff selection rather than dismissal as a way out of staff troubles.
 - (d) Delegate authority and responsibility clearly.
 - (e) Meet with the staff to discuss policies and procedures, especially any tentative plans affecting them.
 - (f) Inform staff members concerning openings in other institutions.
 - (g) Provide a reasonable teaching load.
3. *Be just to his students.*
 - (a) Provide for student leadership and responsibility.
 - (b) Provide the most adequate and workable scheme of classification of students possible.
 - (c) Give grades for work in physical education.
 - (d) Teach skills and games useful in school and in later life to non-athletes as well as athletes.
 - (e) Provide for an extensive rather than an intensive program.
 - (f) Require a medical examination of all participants in physical activities.
 - (g) Take care of injuries suffered in athletic competition.
 - (h) Keep the gymnasium, service units, and play areas clean and sanitary.
 - (i) Provide towels and adequate protective equipment for rugged activities.

established before the facts concerning them are available; however, such cases are infrequent. Except in those rare cases the facts should be collected first and the policies should be based on them.

(b) Every administrator must make some decisions on the spur of the moment and others after but cursory consideration. After the decision has been made or the executive act has been performed, steps should be taken immediately to collect the facts which will enable one to appraise the consequences of the act. At times it is necessary to go beneath the surface to find the real facts, for things may be apparently satisfactory but actually undesirable. The sublime confidence that all is well may be rudely shaken by the jarring of harsh facts. Since it is better to find out for one's self before too much damage has been done than to wait for complaints or friction to call mistakes to one's notice, it is necessary to get the evidence concerning the results of significant executive acts.

(c) It is difficult, but necessary, because of the unreliability of judgment when strongly flavored with emotional content, to eliminate or reduce to the minimum the personal prejudices or desires that influence policy formation. Cursory observation of the display of parental fondness, bordering on ecstasy, at the normal actions of an average, first-born baby offers evidence of the power of emotions over calm judgment. To illustrate further, the old home place is often beautiful to those who have many pleasant memories built around that cherished spot, but only ordinary to the stranger. It is fortunate indeed that feelings of appreciation can make the commonplace beautiful and extremely worthwhile. However, those unacquainted with the personal feelings which have influenced policy formation will note only the mediocrity that results and will judge accordingly. At best, a weak policy is still weak in spite of personal preference for it, and it is generally recognized that a policy can serve only according to its strength.

2. *Be just to his staff.*

(a) One of the well-established principles of applied psychology is succinctly stated in the law of effect. This law declares that other things being equal, the individual tends to repeat those responses which are satisfying and to avoid those which produce annoyance. Every member of a staff has many possibilities for service to the department that can be stimulated into usefulness if he is given

sufficient incentive to exert himself. The law of effect applies in this situation as in ordinary learning situations; stimulation and encouragement will bring about valuable suggestions and outstanding services. By the same token, indifference and destructive criticism will as certainly limit or eliminate valuable suggestions and additional services. No outstanding department can be maintained without the helpful suggestions and volunteer services of most of its members. The enthusiasm which comes when one feels one's self a significant part of the organization often prompts heretofore neglected members to rise from mediocrity to excellence. Appreciation of suggestions and efforts made by members helps to create the feeling of "really belonging."

(b) One of the most severe, yet justifiable, condemnations of physical education today is the contention that those who teach it are not adequately prepared. Several states have special physical education certification requirements and more are adopting them. This fact will help decidedly in putting the physical education program into the hands of a prepared personnel. In the absence of specific certification requirements (a condition that exists in many states), each school system should require ample preparation of prospective candidates for the positions to be filled. For instance, if there is an imperative need for a coach who can win games, a well-prepared prospect should be selected, for there are men of that type available. In many, although not all, smaller communities, teachers are selected because of their ability to teach academic subjects or to coach some sport, and then the most likely person is assigned to teach the remainder of the physical education program. Poorly taught physical education classes are almost certain to result, since the one selected may have little or no training for this additional work. As the community becomes aware of this inefficiency there is a loss of faith in physical education classwork and, consequently, an unwillingness to support it. In this way physical education maintains a position of insignificance in many communities because of an untrained personnel. Even in larger communities no staff member should be hired just for the sake of friendship, for that is unfair to the department and to the trained members of the staff. If physical education is to progress, it must do so under the guidance of a well-trained personnel.

(c) There is no more important phase of administration than that

of selecting a staff, for it is the staff that puts the program into operation and maintains its proper functioning. That portion of a director's budgeted time and effort which is to be devoted to personnel replacements should be expended very largely before actual hiring takes place. Ultimately, this procedure requires less time and is decidedly more pleasant, because it reduces the number of replacements by decreasing dismissals, with their accompanying unpleasantness and implied condemnations. Wise selection requires a thorough understanding of the general and specific qualifications for each staff position, plus the ability to detect those qualifications, or their absence, in prospective members. This presupposes a competent department head who has thought through the entire program. It is hardly possible for a director who does not know just what he seeks to accomplish to select the proper staff to carry out efficiently a program to be determined at some later time. Each staff member employed and later dismissed by the same superior officer is to a certain extent a condemnation of the person who discharges him. He is also apt to be an enemy of the official who must make the decision which deprives him of his position, even though an honest effort is made to place him in a new position. The emphasis should be decidedly upon selection rather than dismissal.

(d) The director should delegate authority and responsibility clearly. In order that misunderstandings may be reduced to the minimum, it is absolutely necessary to delegate clearly. The administrator who permits or encourages two different staff members to believe that they each have complete authority over one phase of the work, in order to avoid the unpleasantness that may result from telling one that he is subordinate to the other, is building toward discord and future trouble. The evil day may be postponed temporarily by this expedient, but it will be all the more violent when it does arrive. Lack of clear delegation of responsibility will provide an excuse for someone to avoid a portion of the unpleasant or arduous tasks, while other conscientious members will do more than their share. It should be pointed out particularly that delegation of responsibility should always carry with it delegation of authority. Anyone who is to be held accountable for a phase of the program must in all fairness have authority to act on matters concerning that unit. It would be no more unfair to hold a coach responsible for a team without granting him authority to conduct practice than it

would be to expect any other staff member to produce results without authority to proceed adequately in his area of operation.

(c) It is important to meet with the staff to discuss policies and procedures; to meet each member in private conference from time to time and to meet all as a group at regular intervals. Morale is developed, in part at least, by getting together and developing a unity of purpose. Many possible minor difficulties can be forestalled by working out different angles of problems together. Builders of enthusiasm know the value of group meetings. Several thousand supporters of a team while in their respective homes could not develop the enthusiasm or unity of purpose that come from getting together in a pep-meeting. A truly great staff must have enthusiasm and unity of purpose, although of a somewhat different type from that of a football crowd. The director who becomes one of the staff, rather than someone apart from it, during the group meetings is building general staff support for the time when he may need it.

(f) Although but a small percentage of physical education staff members are teaching merely for the financial rewards connected with it, practically all of them need money in order to live in a society such as ours, and for that reason they are looking for positions that pay better salaries. Many are also looking for opportunities to rise in the profession even though the salary may not be increased. In order to be just to the staff members, the director should pass on to those who might be interested beneficial information concerning openings in other schools. This may at times deprive his staff of the services of a good instructor, but there are plenty of others who would be glad to work for that type of director. At any rate, staff members should be held through payment of adequate salaries and through their enthusiasm for the department which employs them, rather than by attempts to keep them in the dark concerning possible opportunities for advancement elsewhere. The practice of increasing wages only because some other institution will take an employee away unless it is done is a political procedure and is hardly worthy of an educational institution.

(g) Policies concerning teaching load are discussed in Chapter 5.

3. *Be just to his students.*

(a) If the science instructors of any school blessed with a splendid laboratory for physics or chemistry were to make no provision for

student use of it, they would be justly criticized. Because of the nature of its program and the instinctive urges of the pupils the physical education department has a splendid laboratory for developing social qualities, especially leadership. Those in charge are under as much obligation to use it as are the instructors in charge of a science department to use their laboratory. Such use should provide opportunities for students to assume responsibility and to share leadership in a number of the activities on the program under competent guidance. As has been pointed out in Chapter 2, the incentives to achieve are fundamental and strong, the rewards are satisfying, and action predominates. The leader is the man of action—one who can command in critical situations. Physical education can easily provide many of these situations for developing leadership and responsibility. Any department that fails to do this is not fulfilling its obligations to its students.

(b) There are very definite limits established in most schools beyond which the classification of students for physical education purposes cannot profitably be employed. The present practice of classifying students on the basis of academic ability is the major factor that limits school-wide classification for physical education purposes, because groups cannot be broken down and reformed for each type of activity; this would involve insurmountable schedule-making difficulties. A wide variety of abilities in different activities and relatively few easily applied good tests also limit the scope of classification. It is possible, however, to classify within the actual class in most schools, and within the same grade in some schools. This should be done where possible because in this way physical education can be made more truly educational.

(c) Physical education is one of the educational subjects, and its standing can be established and maintained more adequately by offering the same academic rewards as are offered in other departments for the same excellence of achievement. There will be more incentive to achieve if rewards are commensurate with achievement, than if the students who really work get the same meaningless "Cr." as other students who merely put in an appearance. Grading will make for a better teaching situation and provide a means of interesting a better qualified personnel. As the instructors and students improve, the program will appeal more to the taxpayers, and they

will be more willing to support it. By giving grades, a department of physical education puts itself in a position to offer better service.

(d) The offering in physical education should include activities that are useful during the time that participants are in school as well as after their school days are over. It is entirely possible that a number of activities can serve both purposes well. There are some, however, that will serve better during school days, such as football and basketball, and others which customarily, although not of necessity, serve more generally at a later time. Handball and volley ball are games of this type. Some departments overemphasize the games most interesting and useful during school days, others "go to seed" by sponsoring predominantly those activities which will serve better later in life. Both must be included in a balanced program.

(e) Every normal student in school has the right to expect that interesting physical activities and facilities for enjoying them will be provided for him or her. It is a mistake to expect all students to fit into the mold formed by a few popular physical activities. It is also impossible to provide facilities for every type of activity that any student might desire; but it is entirely possible and reasonable to provide a variety of activities, rather than to concentrate on a few. Inclusion of as large a sampling as the institution can afford and direct should be a goal for every department. By means of this comparatively extensive offering each student has the opportunity of selecting the activities which he enjoys. This policy is in direct opposition to the regulation, not uncommon in colleges and universities, that all students must learn to swim. This old fallacy seems to be built on the supposition that those who can swim will be able to save themselves from drowning when the emergency arises. The facts, often overlooked, are that many good swimmers drown, that a goodly number of people are never put in the position where they need to swim, that swimming (during the winter months particularly) may increase sinus and ear infection in certain cases, and that it is often decidedly unpleasant for those who have difficulties in learning. This unpleasantness may create a dislike for physical education. This is not a condemnation of swimming, which is a splendid activity, but a condemnation of the policy of requiring it of all students. There is no one sport or other activity in which proficiency should be required of all; choice rather than specific requirement marks the progressive activity program. It should be pointed out

here that the instructor should give the best he has to every student, whether or not he is a varsity athlete or ever has a chance to become one.

(f) There are many youngsters as well as adults who are not aware of their own serious ailments. There are still others who will try to keep any information about such a weakness a secret if they have reason to believe that its discovery will deprive them of participation in some favored activity. There is still a third group that will feign illness or an abnormality in an attempt to avoid physical exercise which they probably need very badly. In order that a department may operate with accurate knowledge of the condition of the pupils and thus reduce permanent injuries or even fatalities, a medical examination is necessary. This examination should be given before activity classes or groups meet. Only the careless or inefficient instructor will be satisfied with the examination given at just any time during the semester. The preliminary inspection may be made by the school nurse or some instructor, but the examination proper should be made by a doctor of medicine. It is unwise and may even be dangerous for the coach or physical education instructor to assume a doctor's duties unless he is a physician.

(g) Certain types of athletic competition are apt to result in injuries, such as breaks, bruises, abrasions, sprains, and dislocations. Since some of the participants will not receive treatment unless the school provides it, it is the responsibility of each educational institution to furnish this service. Lack of funds, carelessness, a false belief in the virtue of being able to endure injuries, or fear of parental disapproval of the activity through which this injury was sustained may lead to nontreatment of the injury if the matter is left to the student's initiative. Since the school sponsors interesting, although rigorous, activities, it must take care of the accidents that happen as a result of participation if it is to be just to those who engage in them.

(h) No school has a right to expect or require students to engage in activities or to dress for and bathe after the activities, under dirty and unsanitary conditions. If physical education is to maintain and promote health, the least that can be expected of the department is cleanliness and sanitation sufficient to prevent the spread of disease and infection. That meager minimum is not really adequate, for education at its best is conducted in pleasant surroundings; it even

gains in effectiveness because of an excellent environment. Respect and appreciation are instilled most thoroughly through example. When those in charge show by the condition in which they keep the plan that they respect and appreciate it, then those who come to learn will have similar feelings for the physical equipment and the program that is offered there.

(i) In some situations it is not possible to provide adequate equipment for certain rugged activities. When that condition exists, those activities should not be sponsored by the institution, for severe injuries often result because of inadequate protective equipment. There will be pressure at times from some community groups for certain activities. If the activities are acceptable, those in charge should work toward providing the necessary equipment and even let the community sponsors help secure the equipment, but should refrain from engaging in the activities until it is provided. It is often difficult to keep individually furnished towels clean or even available when they are needed; for that reason it is advisable for the school to furnish towels whenever possible. In many situations it is easier to renounce any responsibility in this matter than it is to plan and carry through a campaign to secure towels, a place to keep them, and an individual to care for them. However, the entire program will function more satisfactorily as a general rule if this service is provided.

4. *Be just to the public.*

(a) The director should keep the public continually informed concerning the educational work being done. By this means those in charge may be able to remain long enough in a situation to carry out an educational program that is planned and partially under way. The parents of a community will co-operate in promoting a worthwhile program for their children if they know about it. They cannot know as much as they should unless they are regularly informed concerning the program. Experience teaches us that the public will support a star about whom it is constantly informed; it will do the same for a good program about which it knows. Any parental or general community support for an educationally sound physical education program for its boys and girls is a step in the direction of justice for the community.

(b) The school is one of the significant units in the socioeconomic

life of any community, and the physical education department is one of the school units that deals most largely with the public. If the school, through its physical education department, is to serve the public best, its members must be acquainted with the other individuals in the community and have some common interests with them. (An educational agency which wins more valuable services from the community because of its close contact with it, is in this very way serving the community, for it is helping the public to help itself.) As the individuals who comprise a community learn to know those in charge of the physical education program better, they will be more sympathetic to it and thus provide an opportunity for physical education to serve the community as a whole. Friendship toward a useful institution or part of an institution enables that institution to render more clearly its optimum service. There will be times when worthy community projects need the assistance that the physical education department can provide, and connection with community organizations will provide a knowledge of the needs as they arise.

(c) Until quite recently it has been common practice for many departments of physical education to spend money according to the day-by-day, or week-by-week demands and then to turn to the school board at the end of the year to make up the not infrequent deficit. That method of handling funds is not only inadequate, because those in charge hardly know where they stand financially, but also unfair to the public. The community has a right to expect that money devoted to conducting the physical education program will be provided for and spent according to a well-worked-out plan. Justice to those who pay the bills demands that there be a budget and that it be closely followed. Planned spending is usually more careful and conservative spending.

5. *Be just to his opponents and competitors.*

(a) Since the public is more generally interested in the physical education program which includes athletics than in any other phase of school work, a greater number of individuals in the community will develop strong emotional attitudes toward parts of this program and toward those who conduct it. Some of these attitudes will be favorable and some will be unfavorable. Those who attack are the opponents of those who sponsor and direct the program. The wise

director will ask the advice of his opponents so that he may know more clearly what his own weaknesses are and how he can correct them. Some of our greatest benefactors are our most severe critics, if we will but profit by their suggestions. Advice from critics is only advice, just as is advice from personal friends—it is to be followed or ignored according to the wishes of the one who receives it. The wise director will also ask the advice of his critics in order that he may discover their weaknesses. He will avoid arguing with them on their weak points because points of difference are seldom cleared up through arguments, but he may explain certain points upon which they are apparently misinformed. Finally, the wise director will ask the advice of his opponents in order to give them an opportunity to explode their ammunition in a rather harmless way or to decide that they don't care to use it at all. It satisfies some persons simply to "get it off their chests" or at least to have an opportunity to do so.

(b) Each school that participates in interschool contests should join an athletic conference. Conference membership promotes understanding through developing acquaintance and establishing rules and regulations. Much of the petty quarreling concerning some phases of Olympic competition could be eliminated if all nations had the same rules and regulations concerning the disputed points. Conference membership improves officiating through common interpretation of rules and established policies concerning the selection of officials. It simplifies the matter of schedule making and helps maintain an interest in the contests. All in all, it makes membership convenient and serviceable to one's competitors and one's own school.

(c) As physical education becomes more educational, visiting teams will be accepted as guests and accorded the treatment due guests. This condition prevails quite generally now among the players themselves, but the spectators, who really have less at stake, are more inclined to exhibit antagonism toward visiting teams. This is due almost entirely to the lack of spectator education. It requires effort and persistence to control crowds, but they can usually be controlled, if those in charge want to control them and will put forth an honest effort to do it. Much improvement has been made in spectator control, but booing is still prevalent enough in many situations to decrease the educational value of the whole procedure.

The first step toward general improvement is to put one's own house in order; then others may be influenced to correct their unsatisfactory practices. This reform is certain to come; it is our responsibility and privilege to hasten the approach of that day.

6. *Be just to the educational system.*

(a) There are few civic organizations, institutions, or departments within institutions in the United States that do not have reasonably sound, forward-looking objectives. However, there are many that have such objectives but fail to attain them with any marked degree of success. Physical education departments are sometimes listed among this group; in fact, physical educators have been accused of having one set of objectives for theory purposes and another for practice. This charge is due in part to the fact that the most interesting and exciting phases of the program are displayed "in the front window," where all may see. The activities of other more protected and secluded departments are thus apt to continue unnoticed while their more evident theories are compared with physical education practices. It is unfair to compare one group's theory with another group's practice. However, in order that the disparity between theory and practice, which does exist in many situations, may be reduced to a minimum, physical education must see to it that the pursued aims and objectives are identical with the stated aims and objectives, which, as presented in Chapter 2, are in accord with the goals of education.

(b) Physical education is not a weak and sickly child in the academic family that needs special care and protection. Instead, it is a healthy, well-nourished member and can better maintain that position by living on a regular diet than by being pampered with sweets and tidbits, in the form of gift grades and special privileges to athletes. This does not mean that the athlete should not have the same opportunities as other students; he certainly should, but he is not entitled to more. Real men are developed by meeting the tests of school and life squarely rather than by depending on special privilege. In terms of a lifetime the student who is passed because he belongs to a certain group is handicapped rather than benefited. For that reason those in charge of an educational unit will not ask for favors but for equal treatment. This will substantiate the principle which a department should make clear to its students—that

no academic immunities are in order since others have not received them. Although this may mean the loss of a few games now and then, it will mean a definite gain in the matter of developing men and women, which is the true justification for any unit of an educational system.

(c) It is important to be a good citizen in the school family; to give as well as take in the matter of sharing facilities. By sharing within reason, a director will build general faculty good will which will help, especially in times of stress, in keeping the department functioning. Other departments will have certain scheduled events that are significant to them, and the director should, insofar as possible, avoid conflicts with those events and their purposes. It is advisable to attend faculty meetings, even though they are not particularly thrilling. By demonstrating that "co-operation" rather than "contention" characterizes the physical education department, the other school departments will be led to respond more readily with the same attitude. The entire school can educate more thoroughly if harmony prevails.

Setting up the Physical Education Unit. The administrator has two important groups of tasks to perform—he must organize or set up the department, and he must administer it or see that it functions properly. Let us consider, first, those acts which are predominantly matters of organization. Those dealing with the functioning of the unit are considered later in this chapter.

Since a large number of the activities listed are discussed at length elsewhere in this text, they will be dealt with very briefly in this connection. It must be understood that the activities of small and large departments differ in degree more than in kind. In the smaller department more duties will need to be performed by the director, whereas in the larger one more duties and authority will need to be delegated to others. In interpreting the material presented, then, allowance should be made for the delegation of many duties in large departments and direct performance of those duties in small ones.

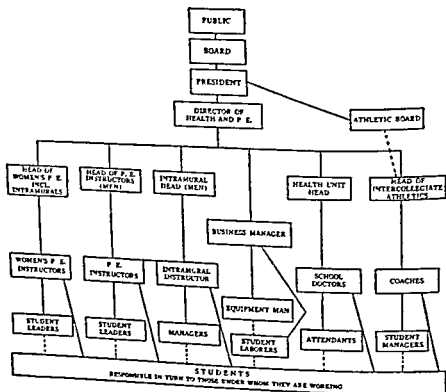
In setting up the physical education unit, there are a number of problems that must be solved. Many of them can well be attacked concurrently, whereas some should be solved before others are attempted, and still others can be worked out best after the foundation is laid.

The first essential task is that of determining aims and objectives. This includes gaining perspective and establishing the relationship in one's thinking between physical education and general education. These aspects have been treated in Chapters 1 and 2. After the aims and objectives are established and the unit is orientated in regard to the educational system, matters of finance, policies, and program should be considered. If the budget dictates the program, as is often the case, it should receive prior consideration. If, however, the situation is fortunate enough so that the program can dictate the budget, then the program should be set up first. After considering the above matters, additional facilities or alterations in facilities can well be considered. By this time it should be apparent that certain positions on the staff are key positions and that others are less significant. The authority and responsibility connected with each position should be clearly established in order that they may be delegated later, when staff appointments are completed. It should be noted here that the staff is to be selected last, to fit the specific situations, after other matters of organization have been considered. Since the matter of administrative relationships is not considered in other chapters, as are the other major problems involved in setting up the physical education unit, it is presented here. There are many plans of departmental organization which will work well provided the following fundamental considerations are maintained: (1) authority and responsibility are clearly delegated; (2) each individual is adequately prepared for his position; (3) multiple responsibility to others, especially for a specific task, is reduced to the very minimum; and (4) co-operation is stressed and encouraged.

The plans of departmental organization showing administrative relationships are presented for large systems in charts on the following pages, but the general plan is the same for smaller ones, except that in the latter case many positions are combined into a few because of marked staff reduction. There is no universal agreement concerning the proper relationship between the health program, the intercollegiate athletic program, and what is commonly called the "physical education program" in institutions of higher learning. Consequently, two reasonably sound types of organization showing administrative relationships based on two of the characteristic philosophies are presented. Various combinations of these two types can be developed from the setups presented.

Even though there is probably more agreement, although by no means universal accord, concerning the relationship of athletics and the rest of the physical education program in a good-sized city school system, two charts are presented for city school systems also.

CHART 1
University Departmental Organization

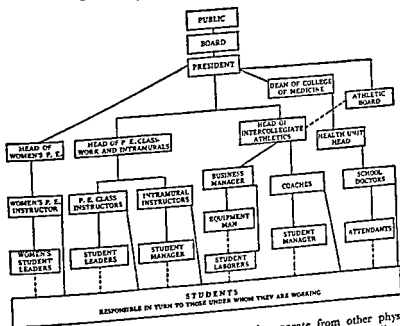


This chart is based on the principle that one individual should head the entire department which includes five major units: health, women's physical education, men's physical education class work, intercollegiate athletics, and intramural athletics.

In the organization charts distance from the top of the chart indicates decreasing administrative rank; hence, the same distance from the top indicates equal administrative rank. An unbroken line indicates direct authority and responsibility (the officer above grants the authority and the one below is responsible to him), a broken line indicates partial authority and responsibility. Co-operative

activity is not indicated, for all members are expected to cooperate. Note the relative scarcity of dual responsibility in these charts. As an aid to simplifying these charts, individuals of one administrative level and type are grouped together and enclosed in one parallelogram. Further, clerical help is not included since in each case the secretary is responsible to the one for whom she

CHART 2
University Departmental Organization



This chart assumes that intercollegiate athletics is separate from other physical education work; that conduct of the health unit is a function of the college of medicine; and that the women's department is also a separate unit.

works. Only skeleton charts are presented since the purpose is to make clear the general plan of administrative relationships rather than to include the maximum number of possible divisions on each level.

Making the Physical Education Unit Function. After the organization has been set up, it is the responsibility of the administrator to

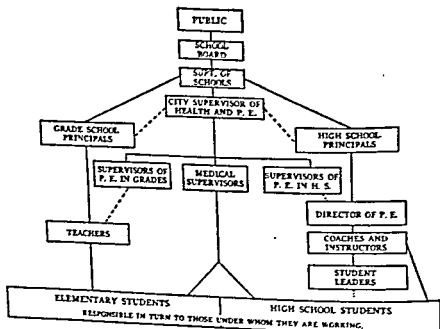
see that it functions. In order to accomplish this, he will need to attend to a number of administrative and nonadministrative duties.

Predominantly administrative duties. Duties of this nature make up the greatest proportion of the administrator's workload. They include:

1. Training his secretary and acquainting her with the way he wants things done.

2. Handling correspondence with a great number of people including faculty, students, alumni, other friends of the institution, officials, repre-

CHART 3
Public School Departmental Organization



This chart presents the physical organization setup for a moderate-sized city system in which one person supervises the health, interscholastic, required, and intramural units.

representatives from other institutions, and representatives of supply and equipment companies. His secretary should read and answer many letters on minor points concerning which she has been trained.

3. Conducting and attending meetings of various groups, including staff, general faculty, committees, athletic council, alumni, clubs, and other community groups, and hold student conferences.

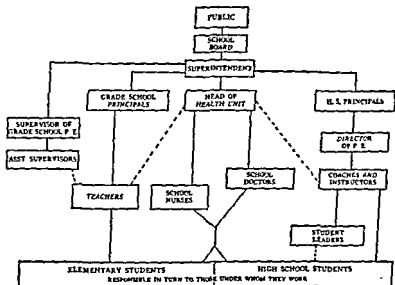
4. Informing the public directly or through some assistant concerning the educational activities of the department.

5. Checking reports from staff members, students, and others after they have been summarized and arranged by his secretary. He must then follow up or set in operation the machinery to care for the significant needs indicated in the reports.

6. Scheduling events or checking the tentative schedules of events that are presented by various staff members.

CHART 4

Public School Organization



This chart assumes that each high school physical education department is an individual division under its respective high school principal; that there is a health unit for the entire system; and that there is a supervisor for all grade school physical education.

7. Checking and making necessary minor alteration in the items listed under organization of the department.

8. Inspecting and observing the condition of facilities and the functioning of the various activity units. The director should by all means know what is happening and under what conditions it is happening.

9. Securing employment opportunities for athletes. Each school group should provide legitimate assistance for those who need it, and the director and some able assistant are often best prepared to do that for the athletes.

10. Directing the registration of students. Appoint staff members to handle the details, but take care of unusual cases, check petitions, and be available for suggestions at registration time.

11. Providing for and maintaining in operation a system of student managers as a means of developing leadership.

12. Scheduling classes or delegating this responsibility to some staff member.

13. Ordering equipment or arranging to have the business manager do so in co-operation with the coach or teacher who is to use it.

14. Making budgets. This will require the administrator's approval, although the necessary information upon which it is based will probably be gathered by other staff members and compiled by the secretary.

Additional duties. Besides the duties connected closely with the functioning of the system, there are many which are not predominantly administrative but may need to be performed by the administrator. They include such matters as coaching, teaching, supervising instruction, writing for publication, making speeches (over the radio, at clubs, at alumni meetings, at school meetings, and in many other situations), doing research, attending chapel, serving as patron at social affairs, entertaining guests, and conducting physical examinations.

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The Physical Education Service Program

The Scope of the Physical Education Program. The total physical education program with which all schools are concerned consists of three aspects, namely: the service, intramural, and interschool programs. Each phase is important, and no physical education program is complete unless each of these aspects is well developed and co-ordinated and integrated. The service program is that which is ordinarily required by state law or local regulation. The classes are scheduled during the school day, and all students are expected to participate unless excused. The emphasis is instructional, and the objective is to provide each student with the minimum essentials of physical education. The intramural program is concerned with the provision of athletic competition for all students within a school. Ordinarily, this competition is over and above that which occurs in the service program. The intramural program is important because it gives all students an opportunity to develop the athletic skills they have been taught in the service program. The interschool program is that phase which is concerned with the provision of competition for the most highly proficient students in the various sports with teams from other institutions. This chapter will be devoted to a discussion of the service program.

The Inadequacy of Present-day Programs. It is unfortunate that in most communities physical education practice lags far behind current physical education philosophy. The curriculum, especially, has not kept pace with the best thought in the field. From the elementary school through the university, the great majority of programs are inadequate and haphazard. There are a number of notable

exceptions in the more progressive schools, but for the most part, the programs are not so soundly conceived and well organized as other courses of study within the school.

This is well illustrated by the most comprehensive survey which has ever been made in physical education.¹ This survey encompassed 2,648 different high schools in 25 different states. It involved the evaluation of the indoor and outdoor facilities, locker and shower rooms, supplies, remedial program, health examination, aquatics, service program, organization, and the athletic and intramural programs. The median national score was only 28 per cent of possible. The various states ranged from 41 per cent of possible (Connecticut) to 17 per cent (Tennessee and Mississippi). Remedial programs (4 per cent) and aquatics (5.8 per cent) were the lowest areas. The next lowest was the area of service program with only 28.7 per cent of possible. The two highest in attainment were organization and administration (43.6 per cent) and athletics (42.1 per cent).

Consequences of Inadequate Programs. The deficiencies in physical education programs were clearly brought out in World War II. One of the major revelations of the war was the lack of physical fitness of a large percentage of men inducted into the military service. Widespread physical fitness tests administered in the armed services showed an alarming lack of strength, particularly of the arms and shoulder girdle. Karpovich and Weiss, in a study of the physical fitness of inductees into the army air forces, found that 48 per cent were in poor or very poor condition.² Larson revealed that it was necessary to improve the physical fitness status of Army Air Forces personnel as much as 90 per cent beyond entrance condition in order to meet minimum physical fitness standards.³ Both the army and navy also found that a large percentage of inductees were in very poor physical condition. These data should occasion no surprise, because our school children likewise are not fit. Kraus and Hirschland found that 56.6 per cent of American children failed

¹ Karl W. Bookwalter, "A National Survey of Health and Physical Education for Boys in High Schools, 1950-54," *Professional Contributions*, American Academy of Physical Education, No. 4 (1955), pp. 1-11.

² Peter V. Karpovich and Raymond A. Weiss, "Physical Fitness of Men Entering the Army Air Forces," *Research Quarterly* (October, 1946), p. 186.

³ Leonard A. Larson, "Some Findings Resulting from the Army Air Forces Physical Training Program," *Research Quarterly* (May, 1946), pp. 144-146.

one or more items on a six-battery test of minimum physical fitness, but that only 8.3 per cent of European children failed the same test.⁴

The development of motor skills in our servicemen was little better than the development of physical fitness. Most incoming men showed marked inability in such basic skills as falling, throwing, jumping, crawling, pushing, dodging, and lifting. Few men knew how to run properly. Posture was poor in a large percentage of men, particularly the older individuals.

The war also revealed school physical education programs have not been particularly successful in accomplishing the recreational objective. Many inductees were found to have limited athletic skills. For example, Larson discovered that from 40 to 50 per cent of inductees did not have a sufficient degree of skill in any sport to desire participation. Only 3 to 5 per cent had participated in varsity athletics. Approximately 30 to 40 per cent were unable to swim. Only a small percentage of servicemen were able to qualify as expert swimmers. The great majority had never participated in golf, badminton, tennis, archery, bowling, and handball before their entry into the armed forces. There is no question that the surface has hardly been scratched in regard to the accomplishment of the recreational objective.

Causes of Inadequate Programs. Inadequate time allotment has been one of the factors which has made it difficult to accomplish the objectives of physical education. Although several states make a daily period mandatory in all elementary and secondary schools, most states do not begin to approach such a requirement. The minimum time allotment required in the various states is indicated on p. 75. In this connection, an extensive study by the United States Office of Education showed that in the 1943-44 school year only 50 per cent of all boys in the eleventh and twelfth grades were provided with any organized instruction in physical education.⁵ This was an amazing revelation in the midst of World War II. That conditions have not improved in the postwar years is evident from the statement by Vice President Richard Nixon at the Annapolis

⁴ Hans Kraus and Ruth Hirschland, "Muscular Fitness and Health," *Journal of Health, Physical Education-Recreation* (December, 1953), p. 18.

⁵ U. S. Office of Education, *Education for Victory*, Vol. 3 (July 3, 1944), No. 1, p. 7.

Conference on Fitness in 1956: "Less than 50 per cent of our boys and girls in high school have physical education."⁴

Another factor which has adversely affected physical education programs is inadequate facilities. Physical education activities, involving as they do vigorous activity, require considerable space, which is usually expensive. In addition, certain activities such as swimming, bowling, golf, handball, and tennis require specialized facilities which are extremely costly. Because of the high expense of many physical education facilities, they are often not provided, and many worthwhile activities cannot be included in the program. Probably more than any other single factor, the limitations imposed by inadequate facilities restrict the type of program which might be offered.

A final reason for the existence of so many inferior programs lies in the fact that educationally sound methods of curriculum construction have not been applied in physical education. The physical educator usually builds his own program. The activities which he teaches will depend upon his training and philosophy. Whether the program is good or bad it is usually accepted. School administrators are usually alert to deficiencies in other aspects of the curriculum but have a lack of critical judgment in regard to physical education which has led to the acceptance of very inadequate service programs. This opportunity for physical educators to construct their own programs has often been exploited. If it is desired to build up the varsity athletic teams, the entire program may be shaped toward this end with no consideration for educational outcomes. This has been a common practice. It is an unfortunate fact that too often the physical education program is organized and conducted for purposes other than the best interest of youth.

Technique of Curriculum Development. Until comparatively recently, the development of the physical education program involved only the director or supervisor of physical education. This individual was presumed to be the expert on curriculum building, and he planned the course of study which the various instructors were expected to follow. In many cases, particularly in large cities, the course of study was worked out in great detail with each day's lesson prescribed, even to the sequence in which the activities were to be presented and the number of minutes which were to be spent

⁴ *Journal of Health-Physical Education-Recreation* (September, 1956), p. 9.

he will invariably be invited to work with the physical education staff. In some schools carefully selected students are included on the committee. Finally, a board member or some prominent individual in the community who has special qualifications might also be invited to participate. In other words, all groups who have a stake in the physical education curriculum or who can contribute to the deliberations are asked to work on the committee.

Steps Involved in Curriculum Construction. A vast amount of literature on curriculum construction and curriculum revision has become available in recent years. Definite procedures are recommended to be followed in developing a school curriculum or a course of study within the total curriculum. These steps usually involve:

1. *Social philosophy.* Any consideration of the nature and purposes of physical education must inevitably be based upon the social and educational philosophy of the time and place in which it operates. Physical educators frequently want to start the curriculum construction process with a consideration of the objectives of physical education and the selection of activities which will attain the objectives. However, prior considerations are involved. Since physical education is a part of the entire system of education, its philosophy and objectives must be consistent with the philosophy which prevails in education. Educational philosophy in turn arises out of the social philosophy of the society in which it functions. Physical education does not exist in a vacuum. It obtains its direction and purpose from the society in which it exists and the educational system of which it is a part.

In America our social philosophy is based upon the belief that the total well-being of each person is a primary and controlling consideration. As Tead expresses it: "It [that is, a democracy] involves the effort of people to live together in ways which assure that for the conduct of all phases of the common life they have necessarily to share, there is a responsibility assumed by all in behalf of all."¹

The basic tenets of a democracy include:

- (a) Worth of the individual. Democracy holds that the individual and the society of which he is a part have common purposes,

¹ Ordway Tead, *The Art of Administration* (New York, McGraw-Hill, 1951), p. 68.

namely, bringing about through effective co-operation the highest and fullest development of each individual.

- (b) Belief in the equality of opportunity for the optimum development of each individual's potentialities.
- (c) Reciprocal individual and group responsibility for promoting common concerns.
- (d) The free play of intelligence in the solution of common problems. In a democracy common problems are to be solved through the free play of intelligence rather than through force, appeal to authority, or uncritical acceptance of the value of any one group or individual.

2. *Educational philosophy.* The basic purpose of education during all periods of civilization, primitive to present, has been and is to enable the individual to become a better citizen of the society in which he lives. No society would tolerate for long a school system whose purposes were not in harmony with the welfare of that society. An educational program is successful only when in all of its aspects it contributes to the purposes of the society in which it lives and has its being. Thus, in America the aim of education is to assist each individual to achieve his optimum development in meeting effectively the continuous demands of living in a democratic society and in a closely inter-dependent world.

Educational objectives implement educational philosophy. They are the steps which lead to the aim. The seven cardinal principles and the educational objectives of the Educational Policies Commission have been stated in Chapter 1.

3. *Statement of objectives.* Objectives express needs as seen by the person or persons who formulate them. Education—and therefore physical education—exists to meet the needs of children. These needs are of two types: individual and societal. Individual and societal needs blend in objectives toward which the school sights are set.

The objectives of physical education are of two types: the ultimate and the immediate. The ultimate objectives are the educational objectives expressed above, that is, the seven cardinal principles or the objectives of the Educational Policies Commission. The immediate objectives have been expressed in Chapter 2 (see p. 30).

4. *The nature of children.* Although the needs of children determine the direction of development for which the school shall strive it

is the nature of the child which determines what is appropriate for education at each stage of development. The best conceivable forms of adult behavior represent goals toward which the education of the child must proceed, but the steps necessary in moving toward these goals are dictated by the character of the child's interests, urges, and capacities. It is evident that a thorough understanding of the nature of the child is an essential prerequisite for the physical educator when he builds a program.

The characteristics of children are rarely given the consideration they merit by physical educators when they organize and develop their courses of study. Considerable physiological and psychological harm has been done by the selection of activities which were not suited to the capacities and interests of the students. Before any program of activities is provided, the demands of those activities on the one hand and the interests, desires, urges, strength, endurance, motor ability, and skills of the students on the other hand must be known. These are outlined for pupils of different grade levels throughout this chapter.

5. *Selection of activities to attain objectives.* This is the most difficult of all aspects of curriculum construction. The activities which are of greatest value in meeting the needs of children are obviously the ones which should be given priority. However, certain activities satisfy the needs of children better in one area than others. For example, some activities are outstanding from the standpoint of developing physical fitness but may be of little value from the recreational standpoint. Other activities may contribute appreciably to the recreational needs of students but have little value insofar as physical fitness is concerned. This poses a difficult problem to those who are developing the program.

To assist in the selection of activities various principles are indicated below (see p. 62).

6. *Administrative provisions to implement program.* Once the activities of the program are selected and an appropriate sequential arrangement worked out, various administrative provisions must be made to facilitate the program. Several sections of this volume are devoted to a description of the provisions.

7. *Evaluation of the program.* The program needs to be periodically evaluated to determine if it is accomplishing the intended results. If it is not, the proper corrective procedures should be

employed. Chapter 18 includes a consideration of evaluative procedures.

Principles For Selection of Activities. In order to select from the many activities of child and adult life those more likely to attain the objectives of physical education, certain guiding principles will be set up. All of the activities of the program will not satisfy all of these criteria, but those which conform to the majority of them are of greatest value. The program based upon the following physiological, psychological, and sociological principles is a practical one, although lack of facilities and inadequate training of teachers may eliminate some of the activities. These practical considerations vary so widely that any modification of the program must be made locally.

PHYSIOLOGICAL PRINCIPLES

1. The physical education program should provide ample opportunities for a wide range of movements involving the large muscles.
2. The facts related to the growth and development of children should guide in curriculum construction.
3. Provision should be made in the program for the differences in physical capacities and abilities which are found among students.
4. The physical fitness needs of students must be met by the physical education program.

PSYCHOLOGICAL PRINCIPLES

5. The physical education program should consist predominantly of natural play activities.
6. The activities should be selected in the light of the psychological age characteristics of the child as well as the physiological.
7. Activities which are valuable in arousing and expressing emotions should be chosen.
8. In the selection of activities some provision should be made for progression.
9. In the selection and placement of activities sufficient time should be provided so that the skills may be learned reasonably well.
10. Select activities which best meet the seasonal drives of the students.

SOCIOLOGICAL PRINCIPLES

11. The curriculum should be rich in activities adaptable to use in leisure time.
12. Activities should be selected for their possible contributions to the youth's training for citizenship in a democracy.

13. The curriculum should be suited to the ideals of the community as well as its needs.

14. Activities which are particularly rich in possibilities for individual character training are especially desirable.

15. Activities which reflect the present social order and anticipate future trends should be provided in the program.

16. All students should be taught activities which can be used at home and in the immediate vicinity of the home.

Inasmuch as these principles form the basis upon which a successful program may be built, the following points concerning each should be noted:

1. *The physical education program should provide ample opportunities for a wide range of movements involving the large muscles.* Physical education is primarily concerned with big-muscle activities. The big muscles are those of the trunk, shoulders, hips, and neck and are used in running, jumping, throwing, striking, climbing, and pushing activities, and the small muscles are those of the face, throat, fingers, and toes. The small muscles are used in writing, drawing, typing, piano playing, and other like activities. In man's evolution, the big muscles are the older, fundamental muscles, and the small muscles are the newer accessory ones. Most of the values attributed to physical education arise from the fact that the activities are big-muscle activities. For example, the development of health has already been mentioned as a prominent objective of physical education. There is little development of health by the action of the smaller muscles because very little organic activity is involved. But when the big muscles of the body are used, they burn up more energy, which results in a greatly increased functional activity of the circulatory, respiratory, and heat-regulating mechanisms and, later, the digestive mechanism. It is this organic activity which develops organic power, vigor, vitality, resistance to fatigue, and health. The only known way to reach and develop the vital organs is through vigorous total body activities.

Moreover, the big-muscle activities contribute to the development of character. To quote from Hetherington:^{*}

The worth of any activity for character discipline is determined primarily by the nature of the instincts and the emotions exercised....The

^{*} C. W. Hetherington, *School Program in Physical Education* (Yonkers, N. Y., World, 1922), p. 27.

values of physical education in character training bulk large, because natural big-muscle activities are the outcroppings of the most fundamental instincts and emotions in human nature.

The character development values of activities involving the use of the smaller muscles are not nearly so great because such activities do not call into play the strongest instinctive tendencies.

2. *The facts related to the growth and development of children should guide in curriculum construction.* In order that the best educational results may be obtained, those activities which are best adapted to the strength, endurance, and co-ordination of each age group should be selected. From the standpoint of the readiness of the organism to assimilate physical education activities, there is a best time for each activity. There is also an optimum degree of exercise that is beneficial at the various stages of development. This principle is recognized somewhat by the modified playing regulations of junior and senior high school sports as compared with college regulations. But much more needs to be done in inter-scholastic athletics as well as in physical education classwork.

Growth and development take place according to a definite and continuous pattern which depends upon hereditary and environmental factors. Growth and development do not proceed evenly and do not occur in the same manner in both sexes. The appearance of new teeth, the slow development of the heart, the physiological changes brought on by adolescence, and sex differences are only a few of the factors which greatly affect the program of physical education. All of these factors will be discussed in more detail when the activities for each age group are selected.

3. *Provision should be made in the program for the differences in physical capacities and abilities which are found among students.* Special provision must be made in the physical education program for the great physical differences which exist among students. In order to avoid a program which would make excessive demands upon any individual, it is necessary to know what his physical capacities and abilities are. The medical examination will discover the physical defects which would handicap or prevent students from engaging in the regular program. For these students other activities must be provided. These activities must be within the capacities of each individual and selected with a view to remedying the defect, if possible.

There are also in every group, those who are appreciably below normal in co-ordination, speed, strength, agility, and balance. Rather than to permit such students to participate in the regular activities, a special program should be arranged to give special attention to their deficiencies. When these students have developed a suitable level of physical fitness, they should return to the regular program.

4. *The physical fitness needs of students should be met by the physical education program.* Automation, by drastically reducing the vigorous exercise involved in work of all types, has accentuated the importance of physical education's contribution to physical fitness. The physical aspects of fitness of each individual should be periodically assessed, and proper activities to meet individual and group needs should be scheduled.

One aspect of physical fitness in which our youth is particularly lacking is strength of the arm and shoulder girdle. This deficiency is serious because it affects successful performance in so many different sports. Unfortunately, some of these sports are not, in and of themselves, particularly good developers of arm and shoulder girdle strength. For this reason, teachers must be alert to this situation, and if a need exists they should provide appropriate activities. Among the better activities to develop strength in the upper extremities are wrestling, apparatus and tumbling, rope climbing, weight training, and selected conditioning exercises.

5. *The physical education program should consist predominantly of natural play activities.* Natural play activities are those which are based essentially on racial activities organized and integrated into games and sports. These racial activities developed thousands of years ago in response to the situations which confronted primitive man. He had to run, jump, throw, strike, chase, flee, pounce upon, dodge, and climb to get food, provide goods, and preserve his life. From time immemorial man has performed these racial activities so that today there is a powerful inner drive in every individual to do these things. But the twentieth century offers few opportunities for their expression except perhaps through physical education activities. Football, basketball, baseball, in fact all of our popular sports, are popular largely because they are composed of natural racial activities. It might well be said that the most interesting activities are those which include most of these instinctive drives. Football is extremely popular because it satisfies so many

racial urges, such as running, jumping, throwing, kicking, dodging, chasing, striking, and fleeing. On the other hand, calisthenics and marching have seldom been popular because they include very few of the racial activities. Expression through these natural play activities is inherently satisfying, for each individual is prepared in his nervous system to respond in the required way. The program, in order to utilize these inner drives to the fullest extent, should consist predominantly of play activities based on them.

6. *The activities should be selected in the light of the psychological age characteristics of the child as well as the physiological.* This is one of the most important factors to be considered in constructing a physical education program. There are rather clearly defined age stratifications in regard to play interests, and the content of the curriculum should be in harmony with them. As a general rule, boys of nine to twelve have developed different play interests from those they had at the six-to-nine-year level. College students usually have different play interests from those in the junior high school. Most men and women can readily recall their own changing interests in their youth. These changes do not appear and disappear at exactly the same time for all children; nor do the latter all desire to express the same play interest in the same way. Individual differences do exist, but there is a striking similarity in the play interests which children manifest at various ages. The good curriculum will be guided by these natural tendencies which appear spontaneously at different ages.

The significance of this for the curriculum builder is that the program should contain a variety of activities from which each individual may select those which interest him most. Of course, the activities of the program must be in harmony with the age level of the group. The selection of physical education activities should begin in the senior high school, which is the place where the election of academic activities begins. Such a wide variety of play activities is presented in the elementary school that election is hardly necessary. It is important that students should have exploratory experiences in a wide variety of activities before they are permitted to elect. Unless they are familiar with all the activities available the privilege of election will be almost meaningless.

7. *Activities which are valuable in arousing and expressing emotions should be chosen.* The development of the intellectual capacities has

so engrossed educators that they have devoted little thought and attention to the emotions, which are the generative forces behind most conduct. Man's behavior has sprung from *emotions and instinct* for so many thousands of years that we cannot expect our conduct today to be based largely upon intelligence. What is needed in our schools, as much as anything else, is provision for the education of the emotions.

Physical education occupies a strategic position among the school subjects for guiding and modifying the emotions. Latin, rhetoric, and mathematics neither arouse the emotions nor offer the opportunities for emotional expression which physical education activities do. Man craves sports and games which are dramatizations of situations that exercise the old racial instincts and emotions. If expression rather than repression were the rule, the mental health of our nation would present a much less serious problem. Emotional stability is only achieved through practice in controlling and modifying the feelings released. Physical education makes a most substantial contribution to education in providing a laboratory setting in which emotional control is practiced. In view of this fact, the curriculum of physical education should include those activities which are particularly valuable in arousing and offering an outlet for emotional expression. Body-contact activities, such as football, basketball, soccer, and wrestling, are very effective in this respect, because they exercise deeper, more powerful emotions than many of the noncontact activities. The contact sports are even of benefit to spectators, who experience them vicariously and give expression to their aroused emotions by cheering.

8. *In the selection of activities some provision should be made for progression.* The physical education program should show progression from the kindergarten or first grade through the twelfth grade. This requires that the elementary, junior and senior high school physical education programs be carefully integrated. Unfortunately, in many instances, the programs at these different school levels are completely unrelated. This results in overlapping and duplication in certain areas and in complete neglect in others. A program that is well integrated will accomplish significantly more results than one which is not.

Every school system should determine what qualities, skills, and attitudes it desires its high school graduates to possess as a result

of their experiences in physical education. These qualities, skills, and attitudes thus become the objectives of the entire school system, and the program at the various grade levels should be developed to accomplish these objectives. All of the activities of the elementary and junior high school should be planned with reference to the senior high school program.

9. *In the selection and placement of activities sufficient time should be provided so that the skills may be learned reasonably well.* Far better results will be secured from a physical education program that provides a few activities to be well learned than from one which offers many activities which are only partially learned. Everyone enjoys doing what he can do well. There are far more values resulting to the individual who has acquired a fair degree of skill in several sports than to the individual who is a jack of all sports and a master of none.

Under this principle, more time will be provided for the more difficult skills. The backward handspring is a more complex skill than the forward roll, and the "full gainer" is more difficult to perform than a "front header" dive. Similarly, the fundamentals of softball are much less difficult to master than those of hard baseball. If a skill is worth acquiring, it should be well acquired. This does not necessarily mean that every skill must be thoroughly mastered by every student in the class. It suggests, rather, that sufficient time be allowed in order to enable the average student to perform the activity with a fair degree of skill.

10. *Select activities which best meet the seasonal drives of the students.* Students have a readiness for seasonal activities. When professional, college, and high school teams are playing football, students have a desire for this sport. When the football season is over, they anticipate basketball and other indoor activities. The spring of the year is time for baseball, track, and field, golf, and tennis. There is far more readiness for indoor activities in disagreeable weather than on bright, sunny days.

life while wise use can enhance health, increase efficiency, elevate character, and enrich and glorify life. Civilization itself can be advanced or destroyed according to the use of it by people as a whole."^{*}

The solution to this great social problem which leisure presents lies with education. Our schools have been slow to realize their responsibilities in this respect, but since the advent of the depression in 1929, more and more attention has been devoted to the activities with which people occupy their leisure time. This concern is not solely with the leisure-time activities of adults, for children of all ages have been emancipated from many of the chores and duties which diminished their available leisure time.

The increased emphasis on avocational activities in the schools is of considerable significance to physical education. Americans, young and old, spend countless leisure hours either playing or watching sports and games. Preparation for all these leisure hours spent in the realm of sport is one of the major objectives of the program of physical education. The practice of postponing until adulthood the education in golf, tennis, handball, volleyball, swimming, squash rackets, and other big-muscle play activities of adults has always failed and will continue to fail to produce satisfactory results. The vast number of college graduates who have very little or no skill in these sports, and will never develop any, is ample evidence of the weakness of the physical education program of the past. Moreover, in order to produce the most favorable educational results, some preparation for the leisure activities of the child should be provided throughout his school life. It would be a mistake to select the activities entirely on the basis of adult needs. One of the outstanding criticisms directed against education today is that the activities are too far removed from the student's present needs and interests and, therefore, are not significant to him. Although it is doubtful that this criticism would be true for play activities to the extent that it is true of academic activities, nevertheless the program of physical education should be adaptable for use in both present and future leisure time.

12. *Activities should be selected for their possible contribution to the youth's training for citizenship in a democracy.* One of the most

^{*} Eugene T. Lies, "The New Leisure Challenges the School," *Journal of Health-Physical Education-Recreation* (November, 1934), p. 18.

fundamental objectives of our educational system is the development of the civic and social virtues desired in a democratic society. These virtues are best developed by practicing them in natural situations. This is possible in physical education activities. Team sports under capable leadership can develop co-operation, loyalty, leadership, followership, sportsmanship, respect for the rights of others, and other qualities essential in the citizens of a democracy. In athletics, the dominating drive to win stimulates the development of these qualities, for youth soon finds out that they are necessary for success. Furthermore, provincialism, which is contrary to democratic principles, is reduced by team sports. Regardless of the diverse nationalities which may compose a team, the players are teammates, and all barriers between them cease to exist as they co-operate for a common purpose. In team competitions, the only measure of a man is what he does as a member of the team—his race, creed, wealth, and class are all forgotten. No better training for citizenship in a democracy is available anywhere in the school system.

13. *The curriculum should be suited to the ideals of the community as well as its needs.* What may be a perfect physical education program in one community might prove to be an utter failure in another. Social dancing is a physical education activity which is readily accepted in certain schools, but which in others would not be tolerated by the community. Boxing and wrestling are extremely popular activities in some communities, but in others they are taboo because of the stigma attached to professional boxing and wrestling. Communities with a large foreign population often prefer soccer to all other activities. Although these foreign communities may prefer their native games, these are not their greatest need in this country. The program of physical education should seek to acquaint the newcomers gradually with American games and sports and American ideals of sportsmanship. Thus, the ideals of the community are powerful factors to be considered in the selection of the content of the program. Likewise, the needs of the community must be reckoned with. In the northern states winter outdoor activities can hold a prominent position on the program, but they may be utterly out of place in the south.

When the physical educator finds himself in a community which is hostile to certain valuable activities, he should hold them in

abeyance until public opinion has become favorable to them. Nothing is gained by attempting to force a physical education program which is unacceptable. The best procedure is to change gradually the attitude of the students and public in favor of the new activities.

14. *Activities which are particularly rich in possibilities for individual character training are especially desirable.* The development of character as an objective of physical education has already been discussed. Because physical education activities exercise the most fundamental emotions and instinctive tendencies, they are powerful factors for developing good character. The skilled teacher, by his teaching, by his suggestions, and by his own example, will utilize the possibilities inherent in sports and games for developing desirable traits of character which will operate in these activities and may even carry over into other life situations.

Considering the great importance of character development and the splendid opportunities which play activities present for developing it, those activities which are of greatest value in this respect should be included in the program. Certainly, football and basketball offer far more opportunities for character education than horse-shoe pitching or badminton does. As was pointed out before, the "worth of any activity for character discipline is determined primarily by the nature of the instincts and emotions aroused."¹⁰

Most forms of athletic competition, particularly contact sports such as football and basketball and combat activities such as wrestling, are of greatest value for character training because they exercise the deep fighting, attacking, fleeing, and egotistic emotions. Football, basketball, soccer, speedball, baseball and wrestling all present wonderful opportunities for character development. Whether or not character is developed in these physical education activities and is transferred to other activities depends upon the leadership.

15. *Activities which reflect the present social order and anticipate future trends should be provided in the program.* The purpose of physical education, in harmony with that of education, is to adjust the individual to society now and in the future. Hence, the program must be based upon present American society. Our former program of transplanted German and Swedish systems of physical education based upon German and Swedish society was, naturally, a failure. Today, our program has become distinctly American, but it must

¹⁰ Hetherington, *op. cit.*, p. 27.

be in harmony with our present social order, which has witnessed so many changes in the past few decades that the physical education program might easily become antiquated. The technological improvements of industry have brought forth striking social changes; the great increase of leisure, specialization of labor, increased monotony and nerve tension of work, and lack of opportunity for creative effort are some of the changes with which physical education is particularly concerned. The physical education activities can be quite effective in securing an adjustment of the individual to these new developments. The curriculum builder in physical education must study social changes and, if possible, forecast social trends in order to permit physical education to make its maximum contribution to the adjustment of each individual to his environment.

16. *All students should be taught activities which can be used at home and in the immediate vicinity of the home.* For many years physical educators have emphasized the teaching of recreational sports, such as tennis, swimming, golf, badminton, and handball, with the expectation that individuals would continue participation throughout adult life. For various reasons this expectation has not been realized. A major difficulty has been that few communities possess adequate facilities for such sports. It has been estimated that the facilities for recreational sports in the average city are adequate to serve only 5 per cent of the adult population. Another difficulty has been that many adults do not have the time to participate regularly in the above recreational sports. Normally, most adults work until the late afternoon, and by the time they get home it is too late or they have little inclination to participate in any of the above activities.

To facilitate the continued and regular participation of adults in physical education activities increasing stress has been given to acquainting students with activities which can be utilized in or about the home. Table tennis, paddle tennis, aerial darts, deck tennis, volleyball, badminton, horseshoes, hand badminton, tetherball, croquet, archery, and softball are all excellent home or neighborhood activities. Many other sports can be modified to home use. Conditioning exercises, bag punching, rope skipping, pulley-weight exercises, weight training, and exercises with the medicine ball and the rowing machine are all effective conditioning activities which can be used at home. Emphasis on home activities should be in

addition to, and not at the expense of, recreational sports like tennis, golf, and swimming.

In addition to the convenience and accessibility home activities have another value. They tend to bring the family together more in exercise and recreation. It has been said that "a family that plays together stays together." At a time when divorce and broken homes constitute one of our major social problems, family recreation should be encouraged. More than 500,000 divorces are granted annually in our courts. Any contribution which physical education may make toward the solution of this problem needs desperately to be made.

How Sex Differences Affect the Program. The differences between the sexes are so important that they deserve special consideration even though they have been provided for by the principles set up for the selection of activities. These differences are anatomical, physiological, and psychological; and in order that the program may best serve its purpose they must be carefully considered. The differences are not sufficiently pronounced until the beginning of the fourth grade to warrant the separation of the sexes in play activities. After that, girls cannot compete equally with boys in running activities. The assumption has been that the pelvis of the girl becomes wider, and this causes a greater obliquity of her thigh bones which handicaps her running ability. A recent investigation at the University of Iowa reveals, however, that the pelvis of the girl is not particularly wider than that of the boy. Lack of practice and less marked arm and upper-body strength are probably important modifying factors. In addition to this disadvantage the girl is not so strong as the boy; nor does she have the endurance which he has. She is particularly underdeveloped in her upper body. This is demonstrated by the fact that the width of her knee approaches that of the boy much closer than does the width of her elbow. The measurements of her lower extremities compare much more favorably with those of the boy than do those of her upper extremities. Baldwin made a comparison of the strength of the right and the left arm and the upper back of boys and girls from seven through seventeen years of age, and he found that the girls were inferior at every age.¹¹ Her smaller heart, chest measurements, and lung

¹¹ Bird T. Baldwin, *The Physical Growth of Children from Birth to Maturity*. State University of Iowa Studies in Child Welfare (Iowa City, State University of Iowa), Vol. I, No. 1, p. 94.

capacity naturally do not permit the girl to have the endurance which the boy possesses.

These handicaps of strength, endurance, and speed are not the only factors which make the separation of the sexes desirable. The menstrual period of girls, which frequently commences in the elementary school, presents a problem which is best handled by the separation of boys and girls. Medical men are fairly well agreed that moderate exercise is desirable during these periods; consequently, there are many girls who take a modified amount of activity if they take any at all at these times. Puberty also brings various psychological differences between the sexes which make separate programs desirable. Boys and girls show greater differences in play activities from eight-and-a-half to ten-and-a-half years than at any other period. Girls become greatly interested in social dancing, an interest which is not shared by boys to a marked degree for a number of years. Boys are interested in personal combat activities, for which girls seldom care. The boy develops a keen competitive spirit in his games and plays hard and aggressively to win. Girls do not demonstrate these traits in their activities because, from the present viewpoint of society, they are undesirable for them. However, both sexes have a common interest in many activities. There is not so much difference in the kind of activity as in the manner in which the activities are engaged in by the two sexes.

Because of these differences it is desirable to separate the sexes in their play activities beginning with the fourth grade. But by the time they reach senior high school and college, they are becoming more interested in the same activities and tend to play together much more. In some junior and senior high schools boys and girls are brought together in certain of the milder physical education activities. The valuable social lessons justify much more coeducational physical education than our schools have heretofore provided.

The high school and college girl needs physical education activities, and it is fortunate that she is not bound by the social taboos which forty and more years ago restrained her predecessors from engaging in vigorous sports and games. Her greatly increased interest and participation in sport activities have made her far superior in physical skills to girls of forty years ago. That such traits as sportsmanship, loyalty, co-operation, and emotional control have been underdeveloped in the girl and are not foreign to her nature

is shown by the big improvement in these qualities since the girl has had the chance to engage in big-muscle play activities, particularly play competitions. As the woman is entering more and more into the social, political, and economic life of the world, she needs the opportunities for developing these desirable social characteristics which the false social standards of the past kept her from doing.

Time Allotment. The matter of time allotment is of great importance because no program of activities can operate successfully unless a proper amount of time is allotted to it. Unfortunately, the time required by most state physical education laws is totally inadequate for a well-balanced program. The minimum requirement for the different states, based on a careful survey for the school year 1950-1951, is as follows:

REQUIRED TIME ALLOTMENT FOR PHYSICAL EDUCATION

<i>State</i>	<i>Elementary School</i>	<i>Secondary School</i>
Alabama	Not specified *	Not specified *
Arizona	Not required †	Not required †
Arkansas	25 minutes daily	80 minutes weekly
California	20 minutes daily	One period daily
Colorado	Not required †	Not required †
Connecticut	Not specified *	Not specified *
Delaware	Not specified *	Not specified *
Florida	30 minutes daily	3 periods weekly
Georgia	30 minutes daily	30 minutes daily
Idaho	Not specified *	Not specified *
Illinois	A daily period	A daily period
Indiana	15 minutes daily	2 hours weekly
Iowa	50 minutes weekly	50 minutes weekly
Kansas	Not required †	Not required †
Kentucky	Not required †	Not required †
Louisiana	2 hours weekly	2 hours weekly
Maine	Not specified *	Not specified *
Maryland	15 minutes daily plus 1 hour of directed play per week	1 hour weekly plus 2 hours of activity per week outside of class
Massachusetts	Not specified *	Not specified *
Michigan	Not specified *	Not specified *
Minnesota	Not specified *	Not specified *
Mississippi	Not required †	Not required †
Missouri	Not specified *	Not specified *
Montana	Not specified *	Not specified *
Nebraska	Not required †	Not required †
Nevada	Not specified *	Not specified *
New Hampshire	Not specified *	Not specified *

PHYSICAL EDUCATION

<i>State</i>	<i>Elementary School</i>	<i>Secondary School</i>
New Jersey	150 minutes weekly	150 minutes weekly
New Mexico	Not specified *	Not specified *
New York	25 minutes daily	One period daily
North Carolina	30 minutes daily	3 periods per week
North Dakota	Instruction daily	Instruction daily
Ohio	Not required †	Not required †
Oklahoma	Not specified *	Not specified *
Oregon	Regular class period daily (excl. recess) ‡	Regular class period daily through 10th grade ‡
Pennsylvania	Not specified *	Not required †
Rhode Island	20 minutes daily	20 minutes daily
South Dakota	Not required †	Not required †
South Carolina	Not specified *	Not specified *
Tennessee	30 minutes daily	2 periods weekly
Texas	Not specified *	Not specified *
Utah	Not specified *	Not specified *
Vermont	Not required †	Not specified *
Virginia	Instruction daily	Instruction daily
Washington	20 minutes daily	Not required †
West Virginia	Not required †	120 minutes weekly
Wisconsin	150 minutes weekly	150 minutes weekly
Wyoming	Not required †	Not required †

* Physical education is required, but the amount is not specified.

† Physical education is not a state requirement.

‡ Includes health education.

The amount of time which should be devoted to physical education in the various grades depends upon the needs of children for big-muscle activity. Under the present circumstances the meager time allotted to physical education is best utilized by devoting it predominantly to instructional purposes, with the hope that there will be sufficient carryover in the leisure-time activities of children to satisfy their needs for big-muscle activity. Physical education leaders believe that approximately an hour a day would be a desirable allotment of time, but few schools ever realize this ideal. Several states require a daily program, but the large majority require only two or three periods per week.

What portion of the allotted time should be devoted to each of the activities in the program must also be carefully considered. The program should be systematically organized and graded in order that the limited time may be used to the best advantage. The practice of devoting the bulk of the time year after year to the same activities is indefensible and reflects an outworn philosophy of physical education. Even the best activity becomes relatively less valuable

after several years of regular exposure to it. To offer basketball for three years in the senior high school physical education program to the exclusion of other important activities is as unjustifiable as to offer the same students the identical course in ancient history for three years. Of course, the more important and complicated activities require greater time than some of the simpler, less important ones. The first appearance of an activity in the program should call for instruction in the fundamentals; later appearances of the same activity call for instruction in the more complicated skills and strategic maneuvers.

THE ELEMENTARY SCHOOL PROGRAM

In addition to the general objectives of education each division of the school has a purpose which is peculiar to itself. The unique function of the elementary school is to provide preparation for the child in the tools of education or, as expressed in the seven cardinal principles, "command of the fundamental processes." It is the place where the child acquires the basic knowledge, skills, habits, and the ideals of thought, feeling, and action which are essential for everyone, regardless of sex, occupation, or social status.

Characteristics of Primary Grade Children. Before the activities for the physical education program in the primary grades are selected it is necessary to know the nature of the child physically, psychologically, and socially. The child is usually five or six years of age when he starts in the elementary school. His preschool years have been spent mainly in getting control of the fundamental movements of his body and in familiarizing himself with his environment. His chief characteristics are:

PHYSICAL CHARACTERISTICS (Ages 6-8)

1. Stature: in the period of slow but steady increase.
2. Weight: in the period of steady growth.
3. Health: susceptibility to disease is somewhat higher than it was before the child started school. The child does not have many antibodies in his blood when he enters school because he has not come into daily contact with large groups of other children. Furthermore, the appearance of permanent teeth may have the effect of lowering resistance somewhat.

4. Pulse rate: higher than in adults.
5. Blood pressure: lower than in adults.
6. Red blood cells: fewer in number; 4,000,000 per cc. of blood is normal for children of this age group, and 4,500,000 to 5,000,000 per cc. is normal for adults.
7. Oxygen debt: the child can accumulate less oxygen debt than adults.
8. Hemoglobin: 85 per cent is normal for adults, and 70 per cent is normal for children of this age group.
9. Heart: smallest in comparison to body size of any age. The heart at the age of seven is one third adult size, but it must supply a body which is nearly one half adult size.
10. Endurance: poor, as would be expected from the red blood cell count, small heart, and hemoglobin content of blood.
11. Strength: not well developed at this period. Arm and shoulder girdle strength are particularly lacking.
12. Eyes: not sufficiently developed to focus on fast-moving, small objects.
13. Co-ordination: child is just getting control of gross movements; not much skill in fine movements yet; kinesthetic control improving.
14. Skeleton: bones are soft and easily deformed. Postural emphasis is needed in these grades because it is difficult to remedy poor posture after the ossification of bones has occurred.
15. Reaction time: not well developed.

Long continued strenuous activity is not desirable for children of the early elementary grades. These children are exceedingly active and crave physical activity but they need frequent rest periods or changes in type of activity.

12. Interest is great in stories, rhythms, swimming, chasing, being chased, hiding and finding, and hunting games.

The following data from a study by Jenkins reveals the child's level of performance in physical education activities:¹³

	Age 5		Age 6		Age 7	
	Boys	Girls	Boys	Girls	Boys	Girls
1. 35 Yd. dash	9.3 sec.	9.7 sec.	8.5 sec.	8.8 sec.	7.9 sec.	8.0 sec.
2. Hop 50 ft. without error	10.8 sec.	10.3 sec.	9.2 sec.	8.9 sec.	8.8 sec.	7.6 sec.
3. Baseball throw at target. Distance 10 ft. Error in inches	8.87 in.	16.9 in.	5.4 in.	14.17 in.	4.2 in.	8.5 in.
4. Baseball throw for distance	23.6 ft.	14.5 ft.	32.8 ft.	17.8 ft.	41.4 ft.	24.4 ft.
5. Soccer kick for distance	11.5 ft.	8.0 ft.	18.4 ft.	10.1 ft.	25.4 ft.	15 ft.
6. Standing broad jump	33.7 in.	31.6 in.	39.3 in.	38 in.	42.2 in.	41 in.
7. Running broad jump	33.4 in.	28.6 in.	45.2 in.	40 in.	58.8 in.	50.8 in.
8. Jump and reach	2.52 in.	2.22 in.	4.02 in.	3.48 in.	4.98 in.	4.28 in.

Such is the picture of the child as he is in the first and second grades. His physical capacities develop slowly and steadily. Co-ordination gradually improves, and by the time the child is in the third grade he may have developed surprising skill in various motor activities. All children need much participation in various play activities, both in school and out, to develop their potentialities adequately.

Rhythmic activities deserve a prominent place in the physical education program for the primary grades. Not only do children enjoy these activities but they are unusually well adapted to their needs. From them children acquire skill in fundamental body movements which are basic to future skilled performance. They learn to appreciate music and to express their ideas and feelings through movement. Co-ordination, balance, graceful movement, and a sense of rhythm are also acquired from rhythmic activities.

The fundamentals of various sports and games of low organization

¹³ Adapted from L. M. Jenkins, *A Comparative Study of Motor Achievements of Children of Five, Six, and Seven Years of Age*, Contributions to Education (New York, Teachers College Bureau of Publications, 1930), No. 414, 54 pp.

involving sport skills can be introduced in the latter part of the second and in the third grades. Years ago, sports were usually reserved until the upper elementary grades or the junior high school period. However, in their out-of-school play young children exhibited an interest and ability in various popular sports. This practice was accentuated by the radio and particularly the television. The child could not help developing a strong interest in the traditional sports at a very early age. All of these factors have encouraged the inclusion of sports activities and elements earlier and earlier in the elementary grades. This does not imply that children of these ages should be taught the highly organized sports like baseball and basketball. It does mean that boys and girls in the primary grades have a readiness and ability to participate in activities which involve the elements of these sports.

In the first grade, story plays and mimetics have great appeal because of the strong imitative and dramatic characteristics of young children. This interest drops off rapidly, however, so that by the third grade further inclusion of these activities in the program is hardly justified. Hunting games become increasingly popular. In addition, various games of low organization and relays which involve imitations of familiar objects are also very popular.

Swimming can be very successfully carried on in the primary grades. In schools with adequate facilities this activity should be included. However, so few schools have facilities or access to facilities that this activity cannot be considered for the ordinary elementary school program.

In the program of activities suggested below the total allotted time is divided among the general types of activity rather than among the specific activities. This is done to permit greater flexibility of the program. The specific activities suggested under each general type of activity are merely illustrative of the kind which should be offered.

Characteristics of Intermediate Grade Children. In the upper elementary grades the boys and girls are separated for part of the physical education program. They should continue to participate in rhythms together to the extent possible, although girls will spend more time on these activities than the boys. It is desirable also to carry on certain of the games and relays coeducationally, although these must be well suited to both girls and boys.

THE SERVICE PROGRAM

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PROGRAM FOR GIRLS AND BOYS

Grades I-III

Grade I

1. Rhythmic Activities 35%

a. Fundamental

Rhythms

Walking
Running
Hopping
Skipping
Galloping
Marching

b. Singing Games

A-Hunting We
Will Go
The Gay Musician
Muffin Man
London Bridge
Baa Baa Black
Sheep
Did You Ever See
a Lassie?
Christmas Game

c. Folk Dances

Shoemaker's
Dance
Danish Dance of
Greeting
Farandole
Turn around Me
Chimes of Dun-
kirk

2. Mimetics

10%

Bear Walk
Bird Hop
Duck Walk
Nutting
Measure Worm
Scooping Sand
Building a Stone
Wall
Bell Ringer

Grade II

1. Rhythmic Activities 35%

a. Fundamental

Rhythms

Walking
Running
Hopping
Skipping
Galloping
Marching
Jumping
Trotting

b. Singing Games

Pussy Cat
Oats, Peas, Beans,
and Barley
Yankee Doodle
Hippity Hop to
the Barber Shop
How D'ye Do,
My Partner
Very, Very Tall

c. Folk Dances

The Crested Hen
Bleking
Children's Polka
Seven Jumps
Lott '1st Tod

2. Mimetics

5%

Chopping Wood
Climbing Ladder
Pumping a Tire
Snow Balling
Skating
Elevator
Rooster
High Limb

Grade III

1. Rhythmic Activities 30%

a. Fundamental

Rhythms

Sliding
Running
Hopping
Skipping
Galloping
Marching
Jumping
Trotting
Skating

b. Singing Games

Carrousel
Jolly Is the Miller
I See You
Thread Follows
the Needle
Looby Loo
Ten Little
Indians

c. Folk Dances

Broom Dance
Tantoli
Hansel and Gretel
Ace of Diamonds
Old Dan Tucker

2. Hunting Games

15%

Three Deep
Cage Ball Tag
Center Base
Signal Chase
Soccer Dodge
Ball
Black Tom

Grade I

3. Story Plays

15%

Circus
Nutting
Brownies
Gathering Flowers
May Queen
Firemen

4. Hunting Games

20%

Run, Rabbit, Run
Squirrel and Nut
Cat and Mice
Puss in the Circle
Fox and Geese
Circle Ball

5. Stunts and Self-testing Activities

10%

Elephant Stand
Camel Walk
Lame Dog
Measuring Worm
Duck Waddle
Stoop and Stand

6. Individual Athletic Events

10%

Ball Toss (rubber ball)
Catch Ball
Beanbag Toss
Catch Beanbag
Standing Broad Jump
Balancing on Line

Grade II

3. Story Plays

10%

Modes of Travel
The Eskimo
Indians
Washing Clothes
Repairing Roads
George Washington

4. Hunting Games

15%

Midnight
Dodge Ball
Cat and Rat
Spider and Flies
Eagle and Doves
Cheese It

5. Stunts and Self-testing Activities

10%

Crab Walk
Seal Crawl
Wheelbarrow
Rocking Chair
Novelty Walk
Full Squat

6. Individual Athletic Events

10%

Catching and Throwing Ball
Throwing Ball for Accuracy
Throwing Ball for Distance
Standing Broad Jump
Rope Skipping
Traveling Ladder

Grade III

3. Stunts and Self-testing Activities

10%

Coffee Grinder
Dead Man
Elbow Balance
Forward Roll
Knee Dip
Backward Roll
Foot Clap

4. Individual Athletic Events

10%

Softball Throw for Accuracy
Softball Throw for Distance
Soccer Kick for Distance
Standing Broad Jump
Running Broad Jump
Rope Climb

5. Relays

10%

Jumpings Relay
All-fours Relay
Shuttle Relay
Cross Over Relay
Stoop and Stretch Relay
Zigzag Running Relay

6. Athletic Games of Low Organization

25%

Line Soccer
Corner Ball
Boundary Ball
Quadruple Dodge Ball
Long Base
Hand Polo
Bat Ball
Newcomb

Grade I

Grade II

Grade III

7. Relays

- 5%
- Rope Skip Relay
- Line Zigzag Relay
- Measuring Feet Relay
- Tag the Wall Relay
- Head Balance Relay
- Indian File Relay

8. *Athletic Games of Low Organization*

- 10%
- Dodge Ball
- Soccer Dodge Ball
- Kick Ball
- Bound Ball

The chief characteristics of children in the upper elementary grades are indicated below. It is necessary to point out that children do not suddenly change when they reach a certain age. The fact is that considerable individual differences exist in children at all school levels. In the fourth grade there will be those who are as advanced as some sixth graders physically and psychologically. The converse is also true.

PHYSICAL CHARACTERISTICS

(Ages 9-11)

1. Height and weight: there is a steady increase in height and weight.
2. Skeleton: the bones are still soft, but ossification is progressing.
3. Endurance: quite improved.
4. Heart: the child is stronger and better able to undergo considerable hard work.
5. Eyes: children can now focus better on fast-moving objects.
6. Co-ordination: many skills are now automatic. The child no longer needs to devote his higher brain powers to his own body movements and he can now think of the play and strategic measures which he might employ to effect his activities.
7. Health: excellent; resistance to illness is high.
8. Strength: improved; but the child is still surprisingly weak, particularly in the upper extremities.
9. Reaction time: excellent.

PSYCHOLOGICAL CHARACTERISTICS

1. Beginning of gregarious spirit—gangs, teams, clubs.
2. Co-operation and teamwork are more developed.
3. The child is less individualistic and self-assertive.
4. Interest in competitive and fighting activities is developing.
5. Interest span is gradually lengthening, and fewer activities are engaged in.
6. There is love of excitement and adventure. The child likes to dare.
7. Interested in practicing to develop skills.
8. Children are ready to assume leadership responsibilities at the end of this period.
9. Girls are very much interested in rhythms, but boys lose interest unless the teacher is very skillful.
10. In the latter part of this period the standards and approval of the peer group become of paramount importance.
11. Boys like to imitate sport heroes.
12. There is a marked interest in the popular American sports.

Children from ten to twelve years of age are predominantly pre-adolescents. This stage of development is distinguished by two outstanding characteristics. The first of these involves an emancipation of the child from his primary identification with adults. Up to this time he has lived in submission and obedience to adults. The dependence upon adults now gives way to a developing individuality with its normal desire for self-direction. The child, in the latter part of this school level, exhibits a growing independence and self-reliance. An attitude of hostility to parental and adult standards frequently develops. The child demands the right to make his own choices.

Secondly, as the child begins to loosen his ties with adults he must turn elsewhere for the security that is so essential for his healthy development. He finds this in his peer group. This is a difficult but essential adjustment to make. This is where the boy and girl obtains important lessons in getting along with others, in give and take, in modifying his desires and actions in terms of other persons. This is also where he acquires another code of behavior—the peer code. Unfortunately, all too often this code is diametrically opposed to that of adult society. Adults must realize that the child is undergoing inner conflicts as a result of his efforts to live up to the standards of both his parents and his peers.

Importance of physical education in the intermediate grades. It is very important at this age level that no pupil fall appreciably behind his group in strength, co-ordination, and skills in the popular activities. Play is the major concern of childhood, and repeated failure in this important realm produces social and emotional disturbances which may have detrimental and unfortunate results in later years. Children esteem those who play well and reject those who do poorly. Eventually this results in the withdrawal of the weak, awkward child from the group.

Jones, in a study in which he compared boys high in strength and physical ability with those low in these qualities found a positive relationship between strength and physical ability and good physique, physical fitness, early maturing, social prestige, popularity, emotional buoyance, self-confidence and an apparently satisfactory level of personal adjustment.¹³ Similarly, those low in strength and physical ability showed a pronounced tendency toward an asthenic (thin) physique, late maturing, social difficulties, lack of status, feelings of inferiority, and personal maladjustment in other areas. He concludes:

Competitive athletic skills are among the chief sources of social esteem in the period preceding maturity. This is attributable not merely to the high premium which adolescents place upon athletic proficiency, but also to the fact that strength and other aspects of physical ability are closely joined to such favorable traits as activity, aggressiveness, and leadership.

Other researchers have reached conclusions similar to those of Jones. Gutteridge states: "Skill in bodily activity is to be ranked first among the factors that lead to the child's acceptance among his peers."¹⁴ Rarick and McKee report: "Proficiency in gross motor activity assumes greater importance (as children grow older) as is evidenced by the prestige placed upon skillful performance by the child's peers."¹⁵ Many other investigators report similar findings.

¹³ Harold E. Jones, "Physical Ability as a Factor in Social Adjustment in Adolescence," *Journal of Educational Research* (December, 1946), pp. 287-301.

¹⁴ M. Gutteridge, *Child's Experiences in Bodily Activity*, Forty-sixth Yearbook of the National Society for the Study of Education (Chicago), Pt. 2, pp. 208-222.

¹⁵ Lawrence Rarick, and Robert McKee, "A Study of Twenty-Third Grade Children Exhibiting Extreme Levels of Achievement on Tests of Motor Proficiency," *Research Quarterly* (May, 1949), p. 142.

The program of activities. Children in the upper elementary grades desire more highly organized activities than they have previously. They are more competitive and they begin to want to play in teams. Sports are a dominant interest for boys and they want to perfect their skills. Games of low organization, individual athletic events, self-testing activities, and modified sports are very popular. Girls are enthusiastic about rhythms but sports attract them also.

PROGRAM FOR BOYS

Grades IV-VI

Grade IV

1. *Rhythmic Activities*

20%

a. Fundamental

Rhythms

Polka

Slide

Schottische

b. Folk Dances

Coming through

the Rye

Children's Polka

The Vineyard

Rovenacka

Pop Goes the

Weasel

Cacbogar

2. *Stunts and Self-testing Activities*

10%

Cartwheel

Squat Stand

The Top

Head Stand

Knee Spring

Pull Stick

Hand Wrestle

Rope Skip

Grade V

1. *Rhythmic Activities*

15%

a. Fundamental

Rhythms

Polka

Slide

Schottische

Waltz

b. Folk Dances

Bleking

Janko

Little Dutch Clog

Minuet

Arkansas Traveler

Captain Jinks

2. *Stunts and Self-testing Activities*

10%

Hand Stand against

Wall

Double Forward Roll

Double Backward

Roll

Indian Wrestle

Hand Jump

Flopper

Human Bridge

Crane Dive

Grade VI

1. *Rhythmic Activities*

15%

a. Folk Dances

Virginia Reel

French Reel

Little Man in a

Fix

School Days

Kerry Dance

Seven Jumps

2. *Stunts and Self-testing Activities*

10%

Chair Vault

Human Fly

Rubber Neck

Mule Kick

Heel Knock

Sack of Wheat

Eskimo Roll

Stiff Leg Bend

Grade IV

3. *Individual Athletic**Events*

10%

Chinning
Pushups
Sit-ups
Baserunning
Softball Throw for
Distance
Softball Throw for
Accuracy
Softball Fly Catching
Soccer Goal Kick
Soccer Dribbling
Soccer Trapping

4. *Relays*

10%

Kangaroo Relay
Arch Ball Relay
Soccer Dribble Relay
Over and under
Relay
Blackboard Relay
Progressive Skip
Relay

5. *Athletic Games of Low*
Organization

25%

End Ball
Long Ball
Pin Soccer
Circle Dodge Ball
Bat Ball
One Old Cat
Six-hole Basketball

6. *Team Sports*

15%

Soccer (modified)
Softball

Grade V

3. *Individual Athletic**Events*

10%

Broad Jump
High Jump
Running Broad Jump
40 Yard Dash
Football Kick for
Distance
Football Kick for
Accuracy
Catching Forward
Passes
Catching Punts
Serving Volleyball

4. *Relays*

10%

Skin the Snake
Arch Goal Ball
Low Bridge Relay
Rail Walk Relay
Sedan Relay
Stick and Ball Relay

5. *Athletic Games of Low*
Organization

30%

Captain Ball
German Bat Ball
Corner Kick Ball
Rotation Soccer
Punt Back
Cage Ball
Newcomb

6. *Team Sports*

20%

Soccer (modified)
Softball
Touch Football
Volleyball

Grade VI

3. *Individual Athletic**Events*

10%

Basketball Pass for
Distance
Basketball Pass for
Accuracy
Basketball Dribble
Goal Shooting
Free Throwing
Six Pound Shot Put
Sprints
Hop, Step, and
Jump

4. *Relays*

10%

In and Out Relay
Dizzy Izzy Relay
Centipede Relay
Hobble Relay
Jump Stick Relay
Squat Jump Relay

5. *Athletic Games of Low*
Organization

30%

Keep Away
Hand Tennis
Deck Tennis
Aerial Darts
Net Ball
Clock Golf
Paddle Tennis

6. *Team Sports*

25%

Soccer (modified)
Softball
Touch Football
Volleyball
Basketball

Grade IV

7. *Hunting Games*

10%

Poison Seat
Circle Chase
Club Snatch
Prisoner's Base
Duck on the Rock
Buddy Spud

Grade V

7. *Hunting Games*

5%

Pom-pom-pullaway
Red, White, and
Blue
Bodyguard
Broncho Tag
Carry to Base
Catch and Pull Tug
of War

Grade VI

PROGRAM FOR GIRLS

Grades IV-VI

Grade IV

1. *Rhythmic Activities*

30%

a. Fundamental

Rhythms
Polka
Slide
Schottische

b. Folk Dances

Coming through
the Rye
Children's Polka
The Vineyard
Rovenacka
Pop Goes the
Weasel
Csebogar

2. *Stunts and Self-testing
Activities*

10%

Squat Stand
Frog Headstand
Knee Spring
Rope Skip
Jumping Jack
Cartwheel
Stick Jump
Human Ball

Grade V

1. *Rhythmic Activities*

30%

a. Fundamental

Rhythms
Polka
Slide
Schottische
Waltz

b. Folk Dances

Bleking
Janko
Little Dutch Clog
Minuet
Arkansas Traveler
Captain Jinks

2. *Stunts and Self-testing
Activities*

10%

Headstand
Handstand against
Wall
Heel Click
Through Stick
Hand Jump
Rocking Horse
Double Forward
Roll
Double Backward
Roll

Grade VI

1. *Rhythmic Activities*

30%

a. Fundamental

Rhythms
Polka
Slide
Schottische
Waltz

b. Folk Dances

Virginia Reel
French Reel
Little Man in a
Fix
School Days
Kerry Dance
Seven Jumps

2. *Stunts and Self-testing
Activities*

10%

Ankle Roll
Mule Kick
Shoulder Roll
Hitch Kick
Knee Dip
Tip-up
The Top
Triple Side Roll

Grade IV

3. Individual Athletic

Events

10%

Softball Throw for
Distance
Softball Throw for
Accuracy
Softball Fly Catching
Softball Pitching
Softball Hitting
Soccer Goal Kick
Soccer Trapping

4. Relays

10%

Kangaroo Relay
Arch Ball Relay
Over and under
Relay
Blackboard Relay
Progressive Skip
Relay
Stride Ball Relay

5. Athletic Games of Low Organization

15%

End Ball
Long Ball
Pin Soccer
Circle Dodge Ball
Bat Ball
Hop Scotch Golf

6. Team Sports

15%

Soccer (Modified)
Softball

7. Hunting Games

10%

Black and White
Circle Stride Ball
Potato Race
Squirrel in the Trees
Three Deep
Crows and Cranes

Grade V

3. Individual Athletic

Events

10%

Volleyball Serve
Volleyball Return
Volleyball Passing
Standing Broad
Jump
Soccer Heading
Soccer Place Kick
Soccer Dribbling

4. Relays

10%

Skin the Snake
Arch Goal Ball
Low Bridge Relay
Rail Walk Relay
Soccer Dribble
Relay
Stick and Ball Relay

5. Athletic Games of Low Organization

20%

Newcomb
Cage Ball
Simplified Soccer
Alley Soccer
German Bat Ball
Clock Golf
Shuffleboard

6. Team Sports

20%

Soccer (modified)
Softball
Volleyball

Grade VI

3. Individual Athletic

Events

10%

Basketball Pass for
Accuracy
Basketball Pass for
Distance
Basketball Dribble
Goal Shooting
Free Throwing
Catching Basketball

4. Relays

10%

In and Out Relay
Dizzy Izzy Relay
Chariot Race
Jump Stick Relay
Squat Jump Relay
Centipede Relay

5. Athletic Games of Low Organization

20%

Twenty-one
Keep Away
Hand Tennis
Deck Tennis
Aerial Darts

6. Team Sports

20%

Soccer (modified)
Softball
Volleyball
Basketball
(modified)

THE JUNIOR HIGH SCHOOL PROGRAM

The junior high school period is one in which all the students are undergoing marked changes physically, psychologically, and socially.

In fact, these adolescent changes were important factors in the development of the junior high school system. At no other age level do such profound changes occur and such wide individual differences exist as during this period.

Characteristics of Junior High School Students. It is obvious that the physical education program for boys and girls of this age level must be geared to accommodate these radical adolescent changes. Before he can successfully set up a program adapted to the needs of these boys and girls, the curriculum planner must be familiar with their various physical and psychological characteristics.

PHYSICAL CHARACTERISTICS

1. Puberty: reached first by girls from one to two years in advance of boys. A small percentage of girls have their first menstruation between ten and eleven years of age; the typical girl starts in her thirteenth year; about 10 per cent do not start until after their fifteenth birthday.
2. Anatomical age: the union of the epiphyses of the metacarpal bones and phalanges of the female hand is completed at the age of sixteen. In the majority of boys this union occurs between eighteen and nineteen, indicating a sex difference in anatomical age of from two to three years.
3. Skeleton: bones grow rapidly, especially the long bones of the arms and legs. This causes posture to become poor unless an effort is made to prevent it.
4. Height and weight: the most rapid acceleration in rate of growth of height and weight is at the age of twelve for girls and fourteen and a half for boys. Prepubescent boys grow 1.8 inches and increase in weight 7.6 pounds in one year. Post pubescent boys grow 3.3 inches and gain 16.6 pounds in one year. Great differences exist among pupils. Some are as much as five years apart physiologically.
5. Strength: develops rapidly after puberty begins in boys. However, the greatest acceleration takes place *after* the rapid increase in height.
6. Motor-ability: continues to improve but at a slower rate. Some boys appear to have a lower motor-ability score during the most rapid increase in growth. Awkwardness is more likely to accompany

the rather sudden beginnings of growth than the later and more rapid growth.

7. Circulatory system: the heart increases greatly in size and volume.
8. Endurance: reduced during the junior high school period.

PSYCHOLOGICAL CHARACTERISTICS

1. Age of loyalty—of teams, clubs, gangs.
2. The peer group assumes great importance.
3. Increasing power of attention. Narrowed interest to fewer games.
4. Power of abstract reasoning developing.
5. Desire for excitement and adventure.
6. Hero worship and susceptibility to adult leadership.
7. Fighting tendency strong in boys.
8. Great interest in dancing by girls, but a loss of interest by boys.
9. Desire of both sexes for competitive activities.
10. Strong interest in personal appearance on part of girls.
11. Confidence in oneself frequently lacking.
12. Tendency to become moody and unstable.

These characteristics of junior high school students call for a program which includes activities sufficiently strenuous to challenge but not overtax the circulatory system. Competition between girls and boys in body contact sports at this time is out of the question because the physical differences between them are greater than when they were younger. However, the fine opportunities for social training which coeducational games offer should be utilized by bringing the sexes together occasionally in dancing and in the less vigorous sports.

A program emphasizing team games of higher organization is consistent with the nature of junior high school boys and girls. Team activities should predominate in this school level. However, as some of the students terminate their school careers at the end of the ninth grade, the program should make some provision for their adult recreational activities. The unique purpose of the junior high school is to present to the child a view of adult activities in order that he may find his interests and more intelligently plan his future. The program of physical education, therefore, should be exploratory and offer a wide variety of activities in order to give the student a chance to find the play interests in which he will desire to specialize later. Because junior high school students have not experienced a wide variety of physical education activities they are not yet ready to

elect. The privilege of election of activities should be reserved for those who have experienced the various possibilities which are available.

PROGRAM FOR BOYS

Grades VII-IX

Grade VII

1. *Rhythmic Activities*

15%

a. Social Dancing

Waltz

Fox Trot

Two-step

b. Square Dancing

Dive for the Oyster

There'll Be a Hot

Time in the Old

Town Tonight

c. Folk Dancing

Swedish Polka

Oxen Dance

Tantoli

2. *Team Sports*

30%

Basketball

Soccer

Softball

3. *Individual Sports*

20%

Track and Field

Handball

Bowling

4. *Gymnastics*

15%

a. Tumbling

Jump the Wand

Through the

Wand

Back Roll to Head

Stand

Press up to Head

Stand

Backspring

Grade VIII

1. *Rhythmic Activities*

15%

a. Social Dancing

Waltz

Fox Trot

Two-step

b. Square Dancing

Take a Peek

Dip and Dive

Red River Valley

c. Folk Dancing

Highland Schot-

tische

Virginia Reel

Maypole Dance

2. *Team Sports*

30%

Touch Football

Volleyball

Softball

3. *Individual Sports*

20%

Track and Field

Wrestling

Badminton

4. *Gymnastics*

15%

a. Tumbling

Under the Wand

Long Dive

High Dive

Round Off

Forward Roll

Combinations

Grade IX

1. *Rhythmic Activities*

15%

a. Social Dancing

Waltz

Fox Trot

Two-step

b. Square Dancing

Texas Star

Oh, Johnny

c. Folk Dancing

Irish Lilt

New Bopetp

Military Schot-

tische

2. *Team Sports*

35%

Speedball

Basketball

Baseball

3. *Individual Sports*

20%

Track and Field

Archery

Tennis

4. *Gymnastics*

15%

a. Tumbling

Half Lever

Forearm Stand

Chest Roll Down

Standing Neck

Dive

Double

Cartwheel

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Grade VII

- b. Apparatus Activities
 - Hand Walk
 - Hand Jumps
 - Skin the Cat
 - Alternate Arm
 - Breast Up

5. Games and Relays 15%

a. Games

- Master of the Ring
- Poison Snake
- Horse and Rider
- Bull in the Ring
- Hit Pin Baseball
- Club Snatch

b. Relays

- Wheelbarrow Race
- Two-legged Race
- Back Support
- Relay
- Crab Walk Race
- Horse and Rider
- Relay

6. Conditioning and Warm-up Exercises 5%

Grade VIII

- b. Apparatus Activities
 - Squat Vault
 - Straddle Vault
 - Thief Vault Mount
 - Neck Spring
 - Single Leg Circles
 - Leg Scissors

5. Games and Relays 15%

a. Games

- Dead Ball
- Box Hockey
- Forcing the City
- Gates
- Ring Push
- Human Tug of War
- Third Man

b. Relays

- Crooked Man
- Relay
- Drive the Pig
- Obstacle Race
- Caterpillar Race
- Leapfrog Relay

6. Conditioning and Warm-up Exercises 5%

Grade IX

- b. Apparatus Activities
 - Shoulder Stand
 - Shoulder Stand
 - Dismount
 - Backward Shoulder Roll
 - Forward Thigh Roll
 - Forward Kip on End
 - Kip from Upper Arm Hang

5. Games and Relays 10%

a. Games

- Chinese Wall
- Roly Poly
- Shuffleboard
- Pitch Pebble
- Clear the Fort

b. Relays

- Chain Relay
- Frog Jump Relay
- Overhead Relay
- Goat Butting
- Relay
- Tunnel Relay
- Chariot Race

6. Conditioning and Warm-up Exercises 5%

PROGRAM FOR GIRLS

Grades VII-IX

Grade VIII

1. Rhythmic Activities 30%

a. Clog and Tap Dances

- Reuben Clog
- Dixie
- Buck and Wing
- Billie Magee

Grade VII

1. Rhythmic Activities 30%

a. Clog and Tap Dances

- The Trio
- Irish Washerwoman
- Bit of a Brogue

Grade IX

1. Rhythmic Activities 30%

a. Clog and Tap Dances

- Yankee Doodle
- Liza Jane
- Jockey
- Sleigh Bells

Grade VII

Grade VIII

Grade IX

- b. Folk Dances
Swedish Polka
Oxen Dance
Tantoli
- c. Social Dancing
Waltz
Fox Trot
Two-step
- d. Square Dancing
Dive for the Oyster
There'll Be a Hot
Time in the Old
Town Tonight

- b. Folk Dances
Highland Schot-
tische
Badger Gavotte
Virginia Reel
- c. Social Dancing
Waltz
Fox Trot
Two-step
- d. Square Dancing
Red River Valley
Dip and Dive
Take a Peek

- b. Folk Dances
Irish Lilt
New Bopeep
Military Schot-
tische
- c. Social Dancing
Waltz
Fox Trot
Two-step
- d. Square Dancing
Texas Star
Oh, Johnny

2. *Team Sports*
25%
Soccer
Nine-court Basketball
Playground Ball

2. *Team Sports*
25%
Speedball
Volleyball
Softball

2. *Team Sports*
30%
Field Hockey
Basketball (modified)
Fieldball

3. *Individual Sports*
20%
Track and Field
Archery
Paddle Tennis

3. *Individual Sports*
20%
Track and Field
Bowling
Badminton

3. *Individual Sports*
20%
Track and Field
Tennis
Handball

4. *Gymnastics*
10%
Tumbling and Stunts
Leapfrog with
Forward Roll
Under Wand
Single Squat
Russian Bear
Backspring
Skin the Snake
Crane Dive
Forearm Stand

4. *Gymnastics*
10%
Tumbling and Stunts
Triangle Stand
Elbow Stand
Long Dive
Chest Roll Down
Press up to Head
Stand
Back Bend with
Wand
Back Roll to Head
Stand
Stump Walk

4. *Gymnastics*
10%
Tumbling and Stunts
Long Dive
Chest Rock
Tandem
Stomach Balance
Double
Cartwheel
Roll over Back
Continuous For-
ward Rolls

5. *Games and Relays*
10%
a. Games
Army Ball
Bombardment
Crowd Ball
Hot Ball
Corner Spry
Chain Dodge Ball

5. *Games and Relays*
10%
a. Games
Broncho Tag
Stride Ball
Poison
Black and White
Hip
Maze Tag

5. *Games and Relays*
10%
a. Games
Round Ball
New Orleans
Signal Chase
Pincho
Slipper Slap
Whip Tag

Grade VII

b. Relays

Monkey Walk
Relay
Lame Dog Relay
Circle Relay
Goal-throwing
Relay
Cartwheel Relay

6. *Conditioning and
Warm-up Exercises*
5%

Grade VIII

b. Relays

Jack Rabbit Relay
Leap Frog Relay
Bend and Stretch
Relay
Human Hurdle
Relay
Line Zigzag Relay

6. *Conditioning and
Warm-up Exercises*
5%

Grade IX

b. Relays

Broom Riding
Race
Drive the Pig Race
Human Croquet
Relay
Centipede Relay
Circle Zigzag Race

6. *Conditioning and
Warm-up Exercises*
5%

In the above junior high school program no form of swimming was included because so few schools have access to swimming facilities. Whenever it is possible to include swimming in the program it should be done because it is one of the most valuable activities in physical education. The time allotment should be taken from the games and relays unit.

THE SENIOR HIGH SCHOOL PROGRAM

Senior high school students are usually from fourteen to nineteen years of age. They have continued to mature physically, mentally, emotionally, and socially. Their capacities are such that few activities are contra-indicated. Their activities represent the peak of the public school program.

Characteristics of Senior High School Students. Characteristics that will influence the physical education program planned for the young people of this group are as follows :

PHYSICAL CHARACTERISTICS

1. Height and weight: the girl has passed through the period of rapid growth. Her height remains comparatively constant, although she will increase in weight. Some boys are pubescent and in the period of most rapid growth. Others are postpubescent and will increase little in height.
2. Strength: increases greatly in boys during this period, although arms and shoulder girdle strength is deficient. The strength of girls reaches its peak at the age of sixteen and declines or remains stationary after this age.
3. Co-ordination : gradual improvement.

4. Skeleton: well calcified, but posture is poor.
5. Circulatory system: at age sixteen it is 82 per cent of adult efficiency. At seventeen it is 90 per cent of adult efficiency. At eighteen it is 98.5 per cent of adult efficiency. Thus, from age sixteen the heart is capable of strenuous activities.
6. Endurance: endurance is better than at any previous age. With proper conditioning, endurance no longer represents a problem except, perhaps, in a few pubescents who are still in the stage of very rapid growth.
7. Reaction time: better than it has ever been.
8. Motor ability: rate of motor learning increases; greater ability to handle the body. Pupils are eager to perfect skills.

PSYCHOLOGICAL CHARACTERISTICS

1. Further narrowing of interests and trend toward specialization.
2. Still an age of loyalty and co-operation, but the desire to belong is tempered by consideration of personal interests and advantages. Still an age of team games.
3. Marked development of self-confidence.
4. Greater powers of attention and reasoning. Increase in ability to participate in group planning and problem solving.
5. Strong interest in grooming and personal appearance by both sexes. Boys are much interested in their physical development.
6. Hero worship is still a strong influence.
7. Fighting tendency is strong in boys. They are highly competitive.
8. Girls have an inclination to be attracted by passive social activities.
9. Strong interest in opposite sex.
10. Increased interest and ability in leading.

As junior and senior high school physical education classes average but two class meetings per week, these periods should be devoted chiefly to instruction and practice under supervision. Two periods per week will by no means meet the needs of high school students for big-muscle play activity, and every effort should be made to interest them in the activities in order that they will desire further participation outside of the class periods. If considerable election of activities is provided in the senior high school, the carryover to the leisure time of the student will undoubtedly be greater. The senior high school boy and girl are qualified to elect at least part of the physical education program if they have experienced a well-rounded, progressive program in the elementary and junior high schools.

The program of activities for senior high school boys and girls is

dominated by highly organized competitive team and individual sports. These are what they want and need. Rhythmic and water activities are also particularly valuable for girls. Rhythmics and combative and heavy apparatus activities should also have a prominent position in the boys' program.

PROGRAM FOR BOYS

Grade X

1. *Rhythmic Activities*
10%
 - a. Social Dancing
Waltz
Fox Trot
Samba
Conga
 - b. Square Dancing
Star by the Right
Old Arkansas
 - c. Folk Dancing
Csardas
Rheinlander
Boston Fancy
Chase the Squirrel
2. *Team Sports*
35%
Soccer
Basketball
Baseball
3. *Individual Sports*
30%
Track and Field
Tennis
Handball
4. *Gymnastics*
15%
 - a. Tumbling Stunts
Hand Stand
Handwalk
Snap up
Upstart with
Hands on Thighs

Grade XI

1. *Rhythmic Activities*
10%
 - a. Social Dancing
Waltz
Fox Trot
Samba
Conga
 - b. Square Dancing
Swing Your Opposite All Alone
Docey out as She Comes in
 - c. Folk Dancing
Tarantella
Reap the Fox
Pop Goes the Weasel
2. *Team Sports*
35%
Touch Football
Volleyball
Softball
3. *Individual Sports*
30%
Wrestling
Badminton
Golf
4. *Gymnastics*
15%
 - a. Tumbling Stunts
Handspring
Handspring
Corkscrew
Giant Roll
Back Bend

Grade XII

1. *Rhythmic Activities*
10%
 - a. Social Dancing
Waltz
Fox Trot
Samba
Conga
 - b. Square Dancing
Boopsa Daisy
The Dollar Whirl
 - c. Folk Dancing
Highland Fling
Hull's Victory
Old Dan Tucker
2. *Team Sports*
35%
Speedball
Basketball
Softball or Baseball
3. *Individual Sports*
30%
Archery
Bowling
Fly-casting
4. *Gymnastics*
15%
 - a. Tumbling Stunts
Handspring
Combinations
Handspring
Combinations
Front Somersault

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Grade X

- d. Modern Dancing
- e. Square Dancing
Star by the Right
Old Arkansas

- 2. *Team Sports*
30%
Soccer
Basketball
Playground Ball

- 3. *Individual Sports*
30%
Track and Field
Handball
Archery
Tennis

- 4. *Gymnastics*
10%
 - a. *Tumbling and Stunts*
Handstand
Handwalk
Round Off
Chair Stand
Rocking Chair
Triple Dive
Extension Roll
Knee Flip
 - b. *Apparatus Stunts*
Squat Vault
Straddle Vault
Forward Kip on
End
Backward Shoulder
Roll

Grade XI

- d. Modern Dancing
- e. Square Dancing
Swing Your Opposite All Alone
Docey out as She Comes in

- 2. *Team Sports*
30%
Fieldball
Basketball
Speedball

- 3. *Individual Sports*
30%
Badminton
Bowling
Golf

- 4. *Gymnastics*
10%
 - a. *Tumbling and Stunts*
Back Bend
Handspring
Headspring
Forward Roll
Combinations
Backward Roll
Combinations
 - b. *Apparatus Stunts*
Backward Heel
Circle
Thief Vault Mount
Backward Hip
Circle
Hock Swing Dis-mount

Grade XII

- d. Modern Dancing
- e. Square Dancing
Boopsa Daisy
The Dollar Whirl

- 2. *Team Sports*
30%
Field Hockey
Basketball
Volleyball

- 3. *Individual Sports*
30%
Badminton
Bowling
Tennis
Golf

- 4. *Home Activities*
10%
 - a. *Conditioning Exercises*
Rope Skipping
Pulleyweight
Exercises
Medicine Ball
Exercises
Table Tennis
Aerial Darts
Croquet

The Block Program. In junior and senior high schools the use of the block program of scheduling physical education activities is recommended. In the block program the time allotment for an activity is concentrated rather than distributed. For example, if it were determined that 30 periods of time were to be allotted to basketball in the senior high school program this entire period

of time would be utilized in a block. Thus, if physical education were scheduled for three periods per week, basketball would be taught for ten consecutive weeks before another activity were scheduled.

A widespread practice is to schedule the same program each year without change. In this type of program, each student repeats in the eleventh and twelfth grades what he had in the tenth grade. This procedure is defended on the basis that students have a readiness for seasonal activities and that they should have them when their interest is so great. This is contrary to the block program.

The authors favor the use of the block system for several reasons. In the first place, they see no educational justification in repeating the same activities in the same way, year after year. They feel that new material should be presented each class period (excepting, of course, an occasional period during which an examination is given or the previous material is reviewed), just as it is in the class meetings for every other subject. The expectation prevails that in an educational institution, the children will grow in understanding, skills, and attitudes. The instructor is expected to start where the instruction terminated the previous period and to carry on from that point.

Secondly, the authors favor the block program because it facilitates learning. If the time allotment for an activity is spread out over a considerable period of time, with other activities intervening, students will forget what they have been taught in previous lessons. Finally, students are better able to develop the skills and the physical condition for a particular activity when the instruction is concentrated. If thirty-six periods are allocated to wrestling for the three years of the junior high school, more skill, understanding, and physical fitness will be developed if all the periods are concentrated during one year than if twelve periods are scheduled for each of three years.

The authors would not be opposed to an advanced course in an activity if it were really advanced. The elementary course should definitely be a prerequisite to the advanced course. In reply to the contention that students want seasonal activities, the authors would agree but would point out that there is a variety of seasonal activities. Wrestling, gymnastics, badminton, and volleyball are just as seasonal during the winter months as basketball. Also, when students

want additional participation in a sport, they may obtain it in the intramural program. For example, if an adequate unit on basketball were provided in the tenth grade, students could participate further in this sport in the eleventh and twelfth grades in the intramural program.

Homogeneous Classes. Teaching is greatly facilitated in junior and senior high schools if students are scheduled for physical education homogeneously insofar as their grade in school is concerned. When the teacher has a class with sophomores, juniors, and seniors in it, his teaching becomes as difficult as it would be for the English instructor who is confronted with the same situation. In fact, it might be more difficult, because the seniors are two years advanced in size, strength, endurance, and skill over the sophomores. When the administrator schedules students of different grades in the same classes, he is making it much more difficult to achieve the educational objectives of the program.

In the majority of secondary schools, students are not scheduled for service classes on a homogeneous basis. However, a sufficient number of schools follow this practice to indicate that it can be done if the principal wants to do it, and the physical education administrator should urge scheduling on this basis. In many cases, it has been successful to present a plan in writing to demonstrate the feasibility of homogeneous scheduling. In other instances, physical educators have volunteered to set up the entire schedule of classes for the high school to demonstrate that it might be done.

No problem of maintaining homogeneous groups would be created if three instructors and adequate facilities were available. In the event that only one instructor were available, the different grades could be taught separately if student leaders were used. In such a situation, the instructor would serve as supervisor of the students. Another solution to the problem is to offer alternating programs. With this plan, the instructor would provide a different program each year for three years. However, this is a poor substitute for scheduling by classes.

Substitutions for Physical Education. In some school systems the substitution of band or ROTC for physical education is permissible. This practice is based on the assumption that physical activity is involved in military drill and in the marching band. It is immediately obvious that this is not a valid justification and that it should be

resisted by the physical education administrator as strenuously as possible. A proper substitution occurs when the outcomes of the different programs are approximately identical. The results of band practice and ROTC are worthwhile, but they are different from those in physical education. The small amount of vigorous exercise involved in these activities would never develop organic vigor, vitality, strength, and stamina. Nor would band practice or military drill develop the neuromuscular skills in motor activities or the social and moral values which can be achieved through physical education.

Still another type of substitution is found in many secondary schools. This involves the acceptance of participation on an interschool squad in lieu of participation in the service program. This practice is based upon the assumption that the values of interschool athletics are synonymous with those of the service program. Proponents of this system point out that the physiological outcomes of athletics are greater than those found in the instructional program. Also, the social and character values are at least equivalent. In addition, it is argued that members of varsity squads, if they also participate in the required physical education program, will get more physical activity than is good for them. Moreover, these athletes could make valuable use of the period normally devoted to physical education classes for study purposes.

The opponents of this point of view point out that instruction is given in a wide variety of activities and that varsity squad members will miss important units of activity if they are excused. It is clear that to excuse those on the football squad from instruction in swimming, lifesaving, tennis, dancing, golf, and the like is to deprive them of exceedingly valuable instruction. These opponents are also skeptical of the claim that participation in the service program will overly fatigue varsity candidates. For these reasons, many leaders do not recommend the substitution of the varsity program for the service class activities.

A middle ground is taken by those who recommend that interschool squad members be excused from the service program when the service course activity is identical to or closely related to the varsity sport in which they are participating. Thus, members of the football squad might be excused from the instructional program when a touch football unit was being covered. They would not be

excused from any other activity. Members of the basketball squad might be excused from participating in basketball service classes.

Preparation of Curriculum Outline. It is a standard practice in secondary schools (and in colleges and universities) to require each instructor of academic subjects to prepare a curriculum outline for all the courses for which they are responsible. This outline is ordinarily prepared in accordance with specifications which have been established in the particular school. A copy of the curriculum outline is filed in the principal's or superintendent's office.

Such a practice is recommended for physical education. The advantages of this procedure have been proven over the years. Yet, in many schools, the physical educator is not required or expected to provide a curriculum outline. Relatively few school administrators have such outlines from the physical education department on file. This is unfortunate and casts a reflection upon the quality of the physical education program and the training and ability of the physical education administrator.

THE COLLEGE PROGRAM

When high school graduates enter a college or university in America they almost invariably discover that like English composition a certain amount of physical education is required for graduation. Although the number of years or terms of the requirement, the hours required per week, and the nature of the program may vary, the great majority of college students must register for some physical education. This practice of requiring physical education is of many years standing. It originated nearly a hundred years ago because college administrators and faculty members considered that a certain amount of participation in physical education activities was essential to the health and well-being of students and, accordingly should be required.

Should Physical Education Be Required? In recent years the validity of the requirement has been debated in many institutions. The arguments in favor of the requirement can be summarized as follows:

1. The health and well-being of the students, both now and in the future, is dependent upon regular exercise. Such activity is a health practice universally endorsed by the medical profession.

2. Unless physical education is required, those who need it most will evade it. The weak, flabby, poorly co-ordinated students have little desire to engage in activities which are difficult for them and in which they have previously proven unsuccessful. No one enjoys participating in an activity in which he appears to poor advantage.
3. Most high schools provide such poor programs that their graduates are not adequately prepared to elect activities in college. To elect intelligently requires a knowledge of the alternatives.
4. Unless there is a requirement, many students who do elect physical education will elect only their favorite sport. Most students will avoid activities with which they are not familiar.
5. A certain amount of regular physical activity is necessary in a college or university to provide respite from the academic pursuits. Students cannot advantageously study all the time. After several hours of concentrated intellectual effort any individual will find himself refreshed after a period of vigorous, enjoyable physical activity.
6. College and university students also need a certain amount of recreation to balance their intellectual regimen. It is to their benefit when their recreation is obtained in wholesome activities, such as sports and games.
7. The physical education requirement does not limit the student to a specific activity but to a field or area of activities. The university requires a certain number of hours for graduation. Practically all of these hours must be intellectual activities. But a small part of this total requirement is to be in the area of movement.

1. Strong, effective physical education programs in the public schools are experienced by all high school graduates. In other words, an elective program would be feasible if all the students who enter colleges and universities came with the knowledge, skills, and attitudes which are the results of excellent public school physical education.
2. Adequate numbers of superior physical education teachers are available.
3. Superior facilities and equipment exist in the institutions of higher learning.
4. The entering students are, in some way, made aware of the opportunities which are available to them in the physical education department. To accomplish this all faculty members in the institution must understand the physical education program and publicize its advantages among their students. An alternative would be to require each freshman to consult with a member of the physical education department who could explain the opportunities the program offers.

It is clear that it will be many years before the above conditions are realized. Even in those states where physical education is most advanced public school physical education is far from ideal. By the same token, only a very small percentage of the institutions of higher learning meet the above stipulations. Under these circumstances it is understandable that most physical educators favor retention of the requirement.

Nature of the Requirement. As has been indicated, most colleges and universities have some sort of requirement in physical education. Hunsicker surveyed the service programs in colleges and universities and found that 90 per cent had some form of requirement.¹⁸ Of these, 21 per cent required physical education for one year; 57 per cent for two years; 6 per cent for three years; 2 per cent for four years; and 4 per cent had a requirement which varied for different schools or departments of the institution. In the majority of institutions of higher education the required classes meet three times per week. A small percentage meet four or five periods per week. The usual length of the period is fifty minutes (out of which must come time for dressing and showering), but a recent trend is to have

¹⁸ Paul Hunsicker, "A Survey of the Service Physical Education Programs in American Colleges and Universities," *Fifty-seventh Annual Proceedings of the College Physical Education Association* (Chapel Hill, N. C., 1954), p. 29.

double periods. This is a desirable development because a single period of an activity in many institutions amounts to only 30 minutes.

Time Requirement. Most institutions appear to require only that each student accumulate a certain amount of credit or successfully complete physical education courses for a prescribed number of semesters or terms. It is not uncommon to specify that within the time requirement each student must either take a course in swimming or pass a proficiency test. Hunsicker's survey showed that in 30 per cent of the colleges and universities a course in swimming was required for graduation. In 33 per cent a proficiency test in swimming was required.

A common practice is to administer a physical fitness test to all entering freshmen. Those who fail to meet the established standard are required to register for a special course which is designed to improve their physical fitness. Once they complete this course, they are free to elect their remaining activities.

Also within the time requirement a number of institutions specify areas from which courses must be taken. For example, each student might be required to pass one course in each of the following categories for graduation:

<i>Aquatics</i>	<i>Combative Activities</i>	<i>Gymnastics</i>	<i>Rhythmic Activities</i>	<i>Team Sports</i>	<i>Individual Sports</i>
Elementary Swimming	Boxing	Tumbling	Square Dancing	Basketball	Handball
Advanced Swimming	Wrestling	Apparatus	Ballroom	Volleyball	Badminton
Water	Fencing	Trampolining	Dancing	Soccer	Tennis
Safety and Lifesaving			Modern Dancing	Speedball	Bowling
				Touch Football	Archery

A few institutions permit students to substitute intramural participation for part of the required work.

Proficiency Requirement. Some colleges and universities make extensive use of proficiency or achievement tests. By passing such a test, which is equivalent to the final examination in a service course, the student is relieved of one term or one semester of the requirement. In other words, if he possesses the skill and knowledge which the average student possesses at the end of a service course, part of the requirement is waived. No credit is granted. In some institutions a skilled, versatile athlete might be able to pass enough

achievement tests to have the entire service requirement waived. Hunsicker reported that 8 per cent of the institutions he surveyed make use of proficiency tests to reduce the requirement.¹⁷

It is likely that the future will see a much greater use of proficiency tests. With the predictions of a doubled enrollment in the next ten years most colleges and universities, with their present facilities and staffs, will be unable to handle the volume of students. It is quite unlikely that sufficient additional facilities will be made available. Under the circumstances, physical educators will be inclined to concentrate upon those who most need physical education. It is also to be expected that public schools will graduate students with better backgrounds in physical education than they have heretofore. Certainly the pressure of heavy enrollments will cause many schools to refrain from requiring a student to take a course in which he is already highly skilled.

Orientation Programs.¹⁸ Some colleges and universities make use of orientation programs. Such programs are predicated on the conviction that physical education should have purposes over and beyond the development of physical fitness and motor skills. Proponents of orientation courses argue that college students need to know something about the philosophy of physical education, its importance in modern life, why it is part of the curriculum, the outcomes which may be expected. They emphasize the value of understanding the origin, backgrounds, development, and significance of sports in our society. Many other areas of knowledge are important, such as sports etiquette, the laws of training and conditioning, safety precautions, physiology of exercise, first aid, purchase of athletic equipment, and the nature and significance of sportsmanship. Certainly, from the standpoint of public relations, the accomplishment of these intellectual objectives would be invaluable.

There are three types of orientation programs. The first type is generally conducted during the freshmen orientation week. This usually involves only one period during which all freshmen are given pertinent information which they need to relate themselves

properly to the physical education, intramural, and intercollegiate athletic programs offered by the institution.

The second type of orientation program is a part of the regular service program. Part of the time is devoted to lectures, movies, discussions, and demonstrations pertaining to related material. This may be done at regular or irregular intervals. For example, one period per week in which the students meet in an academic classroom may be devoted to orientation materials. In some instances outside reading assignments are required. At the University of Illinois a term paper is routinely required in all service courses. The topics include, for example, "physical fitness," "recreation," "history of sports," "keeping fit," "wild-life conservations," and "sporting literature classics."

The third type is an entirely separate academic course. This may be an elective course or it might count as part of the physical education requirement. A textbook is employed which is specifically designed to give the students an understanding and appreciation of physical education.

Survey Course in Activities. In some institutions the physical education program during the first term or first year is devoted to giving all freshmen students an opportunity to participate in a wide variety of activities. For example, ten or twelve activities may be surveyed, with from six to ten periods devoted to each. The purpose is to familiarize students with the most important activities so that their subsequent choices will be made intelligently. It is felt that such a procedure is necessary because of the narrow, ineffective programs in high schools.

Waiver of the Physical Education Requirement. In the majority of schools, both World War II and Korean veterans have been routinely excused from physical education. In addition, in other schools ROTC is accepted in lieu of physical education. In 1949 the College Committee on Physical Education and Athletics, representing the College Physical Education Association, the National Collegiate Athletic Association, and the American Association for Health, Physical Education, and Recreation, issued the following statement in regard to this matter:¹¹

1. It should be clear to all in college physical education and in colleges generally that military science and physical education are not synonymous. They are two different programs employing different techniques, seeking different outcomes, and existing for different purposes. Leaders in both areas recognize these differences. One seeks preparation for defense through military skills and techniques, the other seeks adjustment to democratic ways through recreational skills taught to secure outcomes in total personal development. Confusion remains only in the minds of those who believe that physical fitness is the sole, or at least the principal, outcome of both. Obviously, both military science and physical education (including athletics) have a place in twentieth-century society. They are not, however, mutually inclusive.
2. On campuses where both programs are offered there should be developed a spirit of cordiality and co-operation without infringement, precedence, or domination of one over the other.
3. The College Committee fully subscribes to the recommendation of many other groups to the effect that a course in military science is not a proper substitution for physical education.
4. Likewise, the College Committee strongly urges faculties to establish the principle of equivalence when accrediting military experience with reference to physical education. This problem loomed large following VJ Day, and the Committee feels that some considerable injustice was done many veterans by eliminating them from recreational or therapeutic physical education so necessary to their continuing adjustment to the college or community environment. The best results were obtained on those campuses where credit was given for physical education as it was for other areas of learning; that is, on the basis of experience in services equivalent to the kind and quality of instruction receivable on the campus. The committee recommends that where blanket or indiscriminate credit for physical education was given just because the student was in military service, the practice be now discontinued and experience in physical education from any future military service be evaluated for quality the same as experience in other fields.

Characteristics of College Students.

PHYSICAL CHARACTERISTICS

1. Height and weight: growth nearly complete. There may be a gain in weight.
2. Strength: approaching period of greatest strength which is reached about the age of 24.

These data indicate the desirability of stressing recreational activities in the college service program. Some provision should be made to insure that each college student has some activities which he can use in later life. Certainly activities such as golf, tennis, swimming, dancing, handball, bowling, badminton, archery, skiing, and fly casting, which will provide recreation and enjoyment for thirty or forty years to come, are essential to all college men. Moreover, all men should be equipped with activities which they can use at home to maintain their health and vigor.

The following list of activities is based on the interests and needs of college men. Beginning courses in all of these activities are necessary for those students who lack fundamental training in the sports which interest them. Likewise, advanced courses should be offered for those with an adequate background who desire to go further.

The play interests of college men and women are more similar than they have been since the early elementary grades. There is a strong tendency for them to play together during the college years in some of the milder activities, such as golf, badminton, swimming, tennis, and volleyball. Unfortunately, however, many girls cease their participation in sports once they are no longer required to take physical education. Undoubtedly, much of the blame for this situation can be placed on the formal program of the past. Certainly, formal activities would hardly attract the interest of the girl, particularly at a time when she had so many other things to do. Besides being uninteresting to the girl, the formal program contributed very little to her needs. This situation is changing today. The program for girls and women includes more recreative sports and games, and, with the lifting of social taboos, there will be increasing participation in sport activities.

THE SERVICE PROGRAM

PROGRAM FOR COLLEGE MEN

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Team Sports

Basketball
Softball
Volleyball
Water Polo
Soccer
Speedball
Touch Football
Lacrosse
Field Hockey
Ice Hockey
Rugby
Flickerball

Aquatics

Swimming—beginning
Swimming—intermediate
Swimming—advanced
Diving
Lifesaving

Rhythmic Activities

Folk Dancing
Square Dancing
Ballroom Dancing
Modern Dancing
Clog and Tap Dancing

Individual Gymnastics

Individual Sports

Archery
Boating and Canoeing
Tennis
Golf
Handball
Badminton
Squash Racquets
Fly Casting
Bowling
Ice Skating
Table Tennis
Hiking
Camping Activities
Horseshoes and Quoits
Skiing

Combative Activities

Wrestling
Fencing
Judo

Gymnastics

Tumbling
Apparatus
Trampolining

Home Activities

Conditioning Exercises
Weight and Training
Pulleyweight Exercises
Medicine Ball Exercises
Spring Exercises
Two-man Volleyball
Rope Skipping
Table Tennis
Horseshoes
Croquet
Aerial Darts

have spent it chiefly in passive amusements, such as card parties, teas, and the like. To her dancing activities the college girl needs to add skill in golf, tennis, swimming, badminton, canoeing, equitation, table tennis, archery, hiking, skiing, and bowling. Fortunately, these activities appeal to college girls, who are enthusiastically entering into them.

PHILOSOPHY AND OBJECTIVES

1. The educational philosophy of the department has been formulated in writing and is subscribed to wholeheartedly by the instructional staff.
2. The departmental philosophy is in harmony with the over-all educational philosophy of the college or university as stated in the appropriate publications of the institution.
3. The departmental philosophy is compatible with the principles set forth in the Report of the President's Commission on Higher Education as they relate to the education of college men and women.
4. The major objectives of the instructional program have been formulated in writing, and these specific objectives are compatible with the over-all educational philosophy of the department and the institution.
5. The major objectives of the instructional program cover the potential contributions of physical education in the area of:
 - (a) effective movement;
 - (b) skill in specific activities;
 - (c) physiological function;
 - (d) human relations;
 - (e) knowledge, insights, understandings.

ADMINISTRATION

6. In the development and conduct of the programs of physical education the administrator is committed to action through a democratic process which includes both faculty and students.
7. The department is guided by a sound philosophy of physical education. A concerted attempt is made to interpret a broad concept of physical education to faculty, students, administration and community.
8. The administrator gives consideration to the problems of men and women in regard to policy, budget, use of facilities, equipment, scheduling of classes, intramural programs and makes provision for instruction in coeducational activities.
9. The standards in the institution relating to staff qualifications, teaching load, size of classes, retirement, academic rank, and salaries apply equally to staff members in the physical education department.
10. The department promotes continuous in-service education to stimulate professional growth and improved service to students.
11. The basic instructional program is co-ordinated with other areas. (Intramural athletics, intercollegiate athletics, teacher education, etc.)

12. The source of financial support for the physical education program is the same as that for all other instructional areas of the institution.
 13. Instruction in physical education, properly adapted, is required of all students throughout their undergraduate college careers.
 14. All entering students are given a thorough physical and medical examination by home or staff physician prior to participation in the physical education program. (Followed by periodic exams.)
 15. Exemption from participation in the physical education program for medical reasons is predicated upon the carefully co-ordinated judgment of the medical and physical education staff.
 16. Students are permitted to substitute freshman and varsity sports in season for the purpose of meeting their physical education requirement but return to class at the end of their sport season.
 17. It is the policy of the department not to accept veteran experiences, military drill, ROTC, band, and other extracurricular participation for the required instructional program of physical education.
 18. Credit and quality or grade point value is granted on the same basis as any other area in the educational program.
 19. Facilities and equipment are adequate with respect to quality and quantity.
 20. Guidance and counseling of students is an integral part of physical education program.
 21. Adequate supervision is provided for teaching done by graduate students and teaching fellows.
 22. Comprehensive and accessible records are maintained to indicate student accomplishments within the program.
 23. The department of physical education conducts a program of organized research.
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28. The activities selected make full use of accessible community facilities.
29. The activities selected make full use of local geography and climate.
30. The program provides opportunities through coeducational classes for teaching men and women to develop skills and to enjoy together those activities which bring lifelong leisure-time satisfactions.
31. The activities selected offer opportunities for creative expression and for the development of personal resources.
32. The program provides instruction for efficient body movement in physical education and daily living.
33. The activities selected promote healthful functioning of organs and systems of the body within the limits of present physical conditions.
34. Some of the activities selected encourage all students to develop relaxation skills and to understand their importance, and provide specific opportunities for relaxation and rest where such is indicated.
35. The physical education instruction program provides a means of introducing students to the activities of the intramural program and encourages them to participate in it.
36. The physical education instruction program introduces students, and encourages their participation in, the various recreational activities of the campus and community.
37. The physical education instruction program is integrated with other college programs and services concerned with health education.
38. Teaching methods provide progressive learning experiences through which each student derives the satisfaction in achievement which is essential for continued participation after college.

EVALUATION

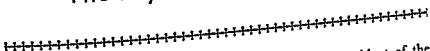
39. The philosophy and objectives of a department are reviewed and re-evaluated periodically.
40. All the objectives, viz., skill, knowledge, attitudes, habits, etc., are included in
 - (a) the evaluation of the program;
 - (b) the final rating (or grade) given a student. The objectives are weighted according to the emphasis given in each course.
41. Selection and use of evaluation techniques are co-operatively planned within the department.
42. Evaluative measures are selected in the light of probable psychological and physiological reactions and result in stimulation of faculty and student interest and enthusiasm.

43. Evaluation of student status and progress are determined at the beginning, during and at the termination of the course.
44. Evaluative procedures are used to determine strengths and weaknesses of individual students and class groups and lead to guidance and help for the individual student.
45. Evaluative procedures are employed to determine strengths and weaknesses of the program
 - (a) for the college student;
 - (b) for post-college life.
46. Evaluative measures are employed only if the results are to be used in some way.
47. Objective measurement is used whenever possible.
48. If objective measurement is not possible, subjective judgment is used for purposes of appraisal.
49. Teachers are familiar with the best available evaluation techniques and use research findings insofar as possible.
50. All students and faculty participating in a course participate in the evaluation of student accomplishments and learning, teaching effectiveness, and course content.

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The Physical Education Staff.



Significance of Staff. James A. Garfield, former President of the United States, said, "Give me a log hut, with only a simple bench, Mark Hopkins on one end and I on the other and you may have all the buildings, apparatus, and libraries without him." Possibly this quotation comes closer to overemphasizing the importance of the faculty in the total school setup than it does to presenting all the factors in correct proportion. However, it points to a significant truth that has at times been overlooked: *no school can be greater than its staff, nor can a program advance beyond the vision of those who administer it*; the program must rely upon the staff to put it into efficient operation. Any philosophy which dictates the selection of staff members on the basis of friendship or politics rather than upon adequate qualifications can only fulfill its program in a mediocre way.

Before 1925 well-trained people in the field of physical education were comparatively scarce. Except for a brief decline during the depression years, the supply of men graduating from college with majors in the field rose gradually from 1925 to 1941, then dwindled to just a few during the war years. From 1946 to 1951 or 1952 the number increased rapidly, after which there was a noticeable decline followed by a slight rise in 1956. Calls from the armed forces temporarily removed from teaching many of the graduates of the past few years. However, the supply of men with a bachelor's degree has recently met and is meeting the demand quite well. The situation concerning women with bachelor's degrees in physical education is entirely different. There has been a marked shortage for years, and indications are that the shortage will continue. This situation provides excellent employment opportunities for women who major

in the general area. The supply of both men and women with as much as two years of graduate training was inadequate in the late forties. By 1955 the supply of men with doctor's degrees was quite adequate, but the supply of women with even as much as a Master's degree was very limited and of those with doctor's degrees was still more scarce. Indications are that the situation will remain much the same for the next several years.

Since requirements for majors vary widely from school to school, it does not follow that all of those who receive degrees are equally trained. Semester hours required in physical education for a major vary from about twenty to more than sixty, and the type of instruction given also varies considerably from school to school. Out of this varied training come many well-prepared graduates, as well as some who are not well prepared. However, the administrator who really desires a well-prepared physical education staff can have it, provided he has even mediocre tact and selecting ability. It costs little more to secure good instructors than to secure poor ones. It is a matter of knowing adequate qualifications and being able to determine which of the candidates have those qualifications. The administrator, in making staff selections, often relies upon recommendations of reliable people about whom he knows, or he may compare recommendations received from those about whom he does not know. In many cases he knows quite well some outstanding prospective faculty member to whom he can offer the position. Some administrators keep a file of excellent people for use when an opening occurs. Those who do the selecting may also provide opportunities for the prospective candidate to exhibit his qualifications by inviting him to participate in informal activities when he visits the local region. By these and other means excellent staff members can be selected.

Qualifications. What, then, are the chief considerations in selecting a physical education instructor? There are four of major importance, which can be ranked according to their bearing upon one's success as a teacher: (1) personality, (2) training, (3) experience, and (4) health. The perfectly qualified instructor has all four in abundance. However, over 99 per cent are not perfect. We must, then, choose among the various important phases.

Personality the most important. As formerly defined, personality is the sum total of an individual's responses to the social situations

in which he finds himself. This means that there are many phases of personality, for personality is as wide and as inclusive as life. There is no such thing as a personality perfect in all situations, for there are no persons who are never angry, never frightened, or never ill at ease at some time in their lives. Each individual shows different aspects of his personality in different situations. The outstanding athlete may exhibit superior personality traits in game situations but may appear to considerable disadvantage in the ballroom or in speaking before the assembly. The son who has been dominated at home by his father becomes almost a different person when he is entirely removed from his father's influence. Situations modify personality traits. The wild enthusiasm loosed by scoring an important touchdown would be out of place in a mathematics class, even if expressed over the solution of an extremely difficult problem. Since personality is extremely wide and inclusive, a list of personality attributes would have to be very long if it were to approach completeness. A reasonably complete list of those traits which are of major importance in the physical education instructor has been presented under personality aim in Chapter 2.

The fundamental basis of personality is character. The two are not synonymous, but basic character traits are sure to crop out occasionally; and if not restrained, they will be prominent in the customary flow of one's reactions. Personality with its fundamental basis of character is most important in a teacher because it is most important in life. It is more important in the physical education teacher-coach than in other instructors because he or she will be copied most frequently by the students. There will be exceptions to this, to be sure, but one thousand teachers who handle the physical education activities in various schools will be copied more often by the student bodies than will one thousand teachers who teach English, mathematics, history, or the other academic subjects in the same schools. The music teacher is now becoming a competitor of the physical education teacher in this respect. Character qualities and acceptable reactions are caught more than they are taught. Yet the teaching of important character traits, even though they are learned indirectly, must be planned. It should be true that those who are better educated have personalities based on sound character rather than upon superficial mannerisms that can be brought to the fore upon demand and then discarded. The mother who has

preached truthfulness to her boy for years can nullify all her efforts by trying to get him into a circus at reduced admission when he is just over the age limit. In the same manner a coach can discredit all his teaching about rule observance by coaching from the side lines, when both he and the players know that such procedure is contrary to the rules. In each case the boys will draw the obvious conclusion that standards are to be lived up to except when there is a personal advantage to be gained by disobeying them. These teachings must be avoided, for they do not constitute a defensible type of character training. Since character is the fundamental basis on which personality is built, the physical education instructor needs to be a person of sound character.

In attaining success in a position, one's personal reaction to youngsters and adults will be of first importance. Training, past experience, health, and all other factors are secondary to this. It is less difficult to teach a new coach the fundamentals and the strategy of a game he has never played than it is to change his personality from one that does not fit to one that does fit his coaching situation. Conducting the class or handling the squad so that morale, with its elements of enthusiasm, co-operation, and determination, is sustained is just as important as teaching skills and strategy. Personality is the prime essential in the morale builder.

Since personality is of such great importance to success in life measured by our common standards of success, and since it can be improved—even though but slowly—through training, every university should have a course in personality development. This course should not be required, nor should it be predominantly academic. An elective, laboratory course based on felt and discovered needs of those who have elected it would enhance the curriculum of any university. It would be progressive and sensible to introduce among the traditional subjects one that deals with positive life values in most social situations. If it does not make for noticeable improvement in all who take it, that is no condemnation; for neither do the traditional courses bring about marked improvement in all pupils who are exposed to them. There are good reasons for placing this course, in part at least, in the physical education department, for many features of a splendid personality laboratory are present there. The instructor in charge should, of course, be a psychologist as well

CERTIFICATION REQUIREMENTS TO TEACH HEALTH AND PHYSICAL EDUCATION IN THE VARIOUS STATES*

E—indicates requirement at elementary level
S—indicates requirement at secondary level
C—indicates requirement of those who coach

State	Requires degree	Requires as much as 10 hours in H & PE	Requires 15 semester hours or more of education courses	Requires specific course or courses
Alabama	S C	S C	E S C	E S C
Arizona	E S C	S C	E S C	S C
Arkansas		S C	E S C	E S C
California	E S C	E S C	E S C	E S C
Colorado	S C	E S C	E S C	E S
Connecticut	E S C	E S		E S
Delaware	E S C	E S	E S C	
Florida		S		
Georgia		C		E S C
Idaho		E C	E S C	E S
Illinois	E S C	E S	E S C	
Indiana	E S C	E S C	E S C	S
Iowa	S C		S C	
Kansas	S C	S	E S C	E S C
Kentucky	E S C	S C	E S C	
Louisiana	E S C			E S
Maine		E S	E S C	
Maryland	E S C	E S C	E	
Massachusetts	E S C	E S	E S C	E
Michigan	E S C	S	L S C	E S C
Minnesota	S C			E S C
Mississippi		S	S C	E S C
Missouri	S C	S C	E S C	
Montana	E S C	S	E S C	
Nebraska	S C	S	E S C	E S
Nevada	S C	S	E S	S
New Hampshire	S C	E S C	E S C	
New Jersey	E S C	S	E S C	E S C
New Mexico	C	S	E S C	E S C
New York	E S C	E S C	E S C	S C
North Carolina	E S C	E S C	S C	E S
North Dakota	E S C		E S C	
Ohio	E S C	S		
Oklahoma		S		

* Stanley Borgman, "A Study of Teacher Education Requirements in Health and Physical Education in the United States" (Unpublished research, Drake University, 1956).

E—indicates requirement at elementary level
 S—indicates requirement at secondary level
 C—indicates requirement of those who coach

State	Requires degree	Requires as much as 10 hours in H & PE	Requires 15 semester hours or more of education courses	Requires specific course or courses
Oregon	E S	S	E S	E
Pennsylvania	E S	E S	E S C	E S
Rhode Island	E S	E S	E S	E S
South Carolina	E S	E S	E S	E S
South Dakota	S C	S C	E S C	S
Tennessee	E S C	E S	E S	E S
Texas	E S C	E S C	E S C	
Utah	E S C	E S C	E S C	
Vermont	E S C	E S C	E S C	
Virginia	E S	S	E S C	S
Washington	E S C	E S C	E S C	
West Virginia	E S	S	E S C	E S
Wisconsin	E S	E S	E S	
Wyoming	S C	S C	E S C	

as a physical educator. That combination is not uncommon, for many physical educators are good practical psychologists in disguise.

Training is second in importance. Training here means the education one secures in school and through similar agencies. In the broadest sense one receives training all of his life; but the word is not customarily used to mean that in connection with the preparation of teachers, and, consequently, it will not be so used here.

From the viewpoint of success in the instructional position, proper or adequate training is more significant than experience or health. Granted equivalent personality qualifications, the instructor with a thorough training and little or no experience is worth much more than the one with much experience, but little or no training. It is difficult to have no training and much experience, for experience often presupposes training. What is often meant by those who contend that experience is as important as training is that experience and training are more valuable than just training. This is true provided the experience has been good, or at least not harmful.

Since the various aspects of training are more readily determined and dealt with quantitatively as units than are the phases of

program, the significance of the administrative position is of less importance than in larger institutions, for only a small portion of the duties are of an administrative nature. Sad, indeed, is the state of physical education when substitutes from other fields are called in, as they occasionally are even in large universities, to administer a program they do not understand. Proper perspective and proportion are gained through familiarity with the units to be administered. Far from needing no training, one needs additional training to head a department or division. It is time now that institutions of higher learning abandon the educational paradox of the blind leading those who can see. How can an educational system that advocates adequate and specific preparation for the position to be held excuse itself for placing unprepared people at the head of a physical education department? It should be readily apparent that training in medicine, law, engineering, or any of the other professions does not prepare one to head a physical education department. Such training is much better than no training but is by no means comparable to training for the specific position. A doctorate in physical education certainly does not qualify one to become the head of a college of law or a college of medicine. By the same token, an advanced degree in either of those colleges fails to qualify its possessor to direct a physical education department.

It is much more acceptable, although usually inadvisable, to place a specialist in one phase of the program at the head of the entire program. This is not advisable if the specialist remains responsible for his specialty, for there is danger of shaping the whole program so that it will contribute to the success of the favored unit. Even though no definite plan is chosen to favor the director's unit, it gradually becomes the favorite in most situations.

Physical education is one part of education; consequently, those who administer this department should have an educational background and a familiarity with many of the units of the program. It is not enough to have coached some sport or to have taken a course in tests and measurements. The administrator of a physical education department in a university should have a Ph.D., or the equivalent in physical education and education. He needs more preparation in educational administration and greater familiarity with the various activity units than does the instructor on the graduate level.

There are certain fundamental courses and activities which should be included in the minor or the major for a bachelor's degree. In many institutions other courses have been added to create background and to help lend academic respectability to the physical education offering. Since advanced degrees often indicate a specialization in some line, no attempt will be made to set up suggested courses leading to the advanced degrees. The particular line of specialization will determine them quite largely. The following educational experiences should qualify the prospective staff member, from the training angle, to teach physical education in high school or elementary school. Unless otherwise noted both majors and minors should have the following training:

1. Intercollegiate competition in two sports is extremely valuable (football and basketball are the most useful). Squad membership in two sports is a minimum essential for high school; less necessary for elementary schools.

2. Those general liberal arts subjects required of all students by the college or school in which they are registered.

3. If science is required, zoology is suggested because of its possible background value for semimedical courses. Physics may be worth more to the physical education minor student who wishes to teach science in high school.

4. Those educational and governmental courses necessary for certification. Practice teaching is included here. Practice teaching experience should provide observation and active teaching in a variety of teaching situations, carry the equivalent of five to seven hours of credit, be supervised regularly by a competent instructor, be under the direction of a well-qualified critic teacher, include regular lesson plans and the use of regular text materials (printed, written, or duplicated). Satisfactory work can be done in either a laboratory school or a public school. When possible, observation in a laboratory school and observation and teaching in a public school are desirable. Regular seminars dealing with plans and problems are recommended. If possible, the practice teaching should be arranged so that a part of it is done in one of the student's minor fields.

5. Activity courses (commonly called theory and practice courses):
 - (a) *Major*—18 to 20 semester hours. This should include football, basketball, gymnastics, track and field, baseball, swimming, other minor sports, low organization games, rhythmic, and nature activities. For high school teacher preparation, football, basketball, and gymnastics are particularly worth stressing. For elementary school teaching, rhythmic and low organization games are of relatively greater importance.
 - (b) *Minor*—8 semester hours, stressing particularly football, basketball, gymnastics, low organization games, and rhythmic.

The training suggested above is presented as adequate and defensible, but not as the only acceptable course of training. In listing subjects or presenting course titles, it is admitted that courses with the same title need not have the same content. Each department or instructor will determine the course content and the manner in which it will be presented. However, the content is generally in accord with the course title. The catalogue offerings listed and the number of staff members employed are not in themselves adequate measures of the value of the training offered. It is what is done in developing skills and attitudes which makes the difference in the final product. Some small schools train their students well, as do some large schools. The hours given need not add up to the total expected or required in every situation. They can be proportionately reduced or expanded to equal the total hours desired or demanded locally. The major student is admittedly better qualified to teach physical education, but less well qualified to teach other school subjects, than is the minor student. For that reason a minor is suggested as worth including in the training setup.

Experience. From the viewpoint of producing a supply of better teachers, experience has two values: (1) it may improve those who participate, and (2) it will help select from prospective instructors those who have the basic qualifications for success in teaching.

The word "may" is used advisedly in connection with the first statement above, because all experience is not beneficial. Some is positively harmful. One is not sure to learn how to succeed through failure. A failure may teach one what to do and what not to do in a specific position, or it may discourage one. That experience which teaches one how to succeed better another time can be extremely valuable although it makes for failure in the present situation. It may be a decidedly helpful experience for a pitcher to throw a ball that is hit for a home run and thus learn what not to do the next time. Individual failures are no particular handicap and do not really make much difference. It is what the one who fails does about it that really counts. The true value of experience from the viewpoint of improving teachers is that it be genuinely successful and that it lead to better future performances. To be valuable, it should also be varied. Ten years in the same position doing the same things is less valuable than the same excellence of

experience in several positions doing varied tasks. In terms of experience repetition of the same thing soon yields a rapidly diminishing return.

Experience serves as a testing device for those who select teachers. By applying pressure from various directions, strong boxes can be selected out of a group of boxes varying in strength. The pressure does not make the strong boxes strong; rather, it provides a method of determining which ones are strong. Experience does the same thing and more for teachers. It furnishes a practical means of selecting the good ones, while giving all a chance to improve to a limited extent. Many good teachers have the essentials at the start, as do the strong boxes, and experience helps classify them.

Two years in a position should familiarize an instructor with the new techniques and try him out sufficiently to meet most experience requirements. It is not correct, however, to assume that the instructor is poor because his efforts do not meet with approval in one situation. At least another two-year period of failure is necessary before the experience rating can justly be "poor," and even then the individual may succeed, although he is more apt to fail, in a third position.

Health. It is readily apparent that the entire absence of health would make it impossible for one to teach just as would the entire absence of personality or training. However, health is the least important of the four significant factors that make for success in teaching. One may teach more acceptably while enduring *some* illness than he can with health and a very poor personality or inadequate training; though, of course, he will be less happy than if he were enjoying health. Even experience, third among the four significant factors, contributes more to teaching success than does health. Lack of mental health is more of a handicap than lack of physical health.

Certain forms of illness—some mental, others physical—are of such a nature as to make the one afflicted with them a positive detriment in the school room or gymnasium. Tuberculosis and extreme nervous or emotional instability (which might be included under personality) are each contagious enough to condemn their possessor as unfit to teach. Still there are many instructors, afflicted with one or the other, who are teaching acceptably enough to be allowed to remain in teaching positions. Some diseases do not have enough apparent effect on teaching success to cause dismissal, even though they are

liable to be harmful to the pupils. Certain diseases are apt to be harmful to pupils without becoming an immediate cause of loss of present or prospective teaching positions. To protect the health of the pupils, then, a medical examination should be required of all teachers, and those with contagious diseases should not be employed.

Teaching Load. Sound administration requires thorough consideration of the amount of work assigned to each staff member, just as it does careful staff selection.

Extremes in teaching assignments are undesirable. It is worse administrative procedure to assign heavy loads to some staff members and only half loads to others than it is to assign too much work to all; for a general overloading may have the defense of necessity, while the partiality evident in grossly unequal assignments has no defense. Even though necessity demands temporary overloading in some cases, the efficient administrator will work persistently for a normal load for his staff. An excellent, but overworked staff, may produce only mediocre results. If physical education is worth teaching at all, it is worth teaching well.

The elementary and high school load should not exceed thirty-five hours per week. Thirty hours is better from the viewpoint of efficient teaching. The load on the graduate and undergraduate levels in college or university should not exceed sixteen hours per week of academic class work. Activity class work should be computed on the basis of one and a third hours for each academic class hour. The administrator in a system large enough to have a department head with only administrative duties should determine his own load. It is his responsibility to spend enough time as his various duties to make the department run efficiently. He must do that whether it requires ten or sixty hours a week. In the event that he is doing part time administrative work, his teaching load should be reduced accordingly.

Proper class size depends on such factors as space and equipment available, type of activity, degree of classification of pupils for activity, and grade level. Even though there are many modifying factors, certain general conclusions regarding class size may prove valuable. Generally a class of from thirty to forty pupils is not too large to provide an excellent teaching situation. Under favorable conditions a good teacher can produce acceptable results with classes ranging in size from fifty to sixty pupils. Favorable conditions

include ample facilities and certain specific activities that lend themselves well to use by large groups. It requires a marvelous teacher to produce even mediocre results with a class of one hundred or more. Necessity usually demands simply riding herd, instead of teaching, when the group is that large.

Training in Service. The supervisory phase of staff improvement is included here because it fits well rather than because of the assumption that the supervisor is an administrative officer. Customarily, the supervisor is not an administrative officer, although the same person may be responsible for both phases of the work. Training in service is particularly important for the beginning teacher or coach. This phase of improvement of instruction is largely a problem for high schools and elementary schools, since most instructors start there. Some of the better organized college and university physical education departments provide for supervision of instruction, especially for the new and inefficient members. Three significant obstacles prevent others from doing it: (1) the staff members who need it may resent the implication behind proffered assistance; (2) those in charge may be poorly trained in general supervision or in the specific activity under consideration; and (3) the need for supervision may not be recognized.

After the staff has been selected and is ready to be put to work the following means of improvement are suggested:

1. Developing the learning attitude.
2. Encouraging additional study.
3. Providing reading material.
4. Providing good examples.
5. Conducting meetings.
6. Rewarding improvement and alertness.

can become contagious enough that the whole staff accepts the attitude of wanting to learn. Then pursuit of the other phases of improvement will bring significant results.

More and better opportunities to study during the period of employment are being offered by colleges and universities. Credit courses are offered by means of correspondence and Saturday classes. A few hours can be earned by this means each semester. Night schools, too, provide an opportunity, for those who live in certain regions, to get both training and academic credit. Radio lectures and university-owned moving pictures provide further means of education, customarily without credit. Although not truly training while in service, summer schools might well be mentioned in this connection. The summer school offerings of many institutions are now sufficiently extensive to meet the needs of advanced study in any recognized field.

It is not enough to provide just any reading material. Certain types are worth more than others. Three of these are suggested as particularly valuable: (1) an occasional good background book to help give perspective, (2) mimeographed or typed material, from the supervisory officer, dealing with sources of information, methods, plans, and the like, and (3) specific references dealing with the topic upon which additional information is desired or needed. An enthusiastic faculty will locate much of this material and pass it around to those who can use it. However, the supervisor will need to provide additional sources even in the better situations.

Many approaches are possible in providing good examples: (1) the supervisory officer may well demonstrate a certain lesson or procedure, preferably with some other group than that of the instructor for whose benefit the demonstration is given, in order to avoid undermining the students' confidence in the instructor; (2) each staff member should have an opportunity to demonstrate his or her specialty or some well-developed technique; (3) moving pictures of excellent performers can be shown; (4) opportunities should be provided to visit excellent teachers in neighboring cities—a day or two each year spent in this manner can be extremely valuable; (5) coaching clinics contribute their bit; and (6) short two-day coaching schools, with demonstrations, during the Christmas vacation season, are valuable.

Two types of meetings are essential in supervisory work: (1) the

group meeting, and (2) the private conference. The one in charge must take care to avoid dominating the situation too thoroughly. If the purpose in mind is that of giving information or expressing the supervisor's views, this can be accomplished almost as well through written material, and thus much of the individual instructor's time can be saved. Questions and discussions are essential elements in both group and private sessions. These features are readily promoted by providing for free expression. This should be the place where each one may say what he thinks; and, incidentally, many of the statements made should not be repeated outside. It is wise to allow criticisms and suggestions to be made in open meetings, for if they are not countenanced in the group conferences, they are apt to be expressed elsewhere. Each supervisor must guide the trend of the discussion and decide quite largely the topic to be introduced, but any staff member should have an opportunity to raise questions and make suggestions. An occasional correction of an administrator's or supervisor's mistake through discussion in a staff meeting may be a healthy procedure. It certainly should not be avoided at the cost of free expression.

By employing the last of the six suggested methods of improving instructors in service, the administrator promotes the first essential procedure listed. When there are rewards for alertness, co-operation, and service, then the staff will strive to improve. Some of the common methods of improving instruction through rewarding efficient, co-operative service are: (1) increasing salary; (2) giving a little well-directed praise; (3) increasing rank and authority; (4) providing educational publicity concerning meritorious service, and (5) passing on information concerning better positions that have opened or are about to open.

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School Health Education

Relationship of Health Education and Physical Education.

Many people regard health education and physical education as synonymous or one as being part of the other. This is an entirely erroneous impression. Health education and physical education are separate and distinct, though closely allied, fields. Physical education is that phase of education which comes about through or in connection with vigorous muscular activities. Health education, on the other hand, comprises all of the experiences which contribute in any way to the individual's health knowledge, health habits, and health attitudes. Health education differs from physical education in subject matter, methods, and in some purposes.

Physical education has important contributions to make to health education, and vice versa. Inherent in physical education are exceptional opportunities to develop health knowledge, health habits, and health attitudes. On the other hand, the emphasis in health education on such areas as exercise, nutrition, recreation, rest, and desirable health practices has important implications for physical education. However, a lecture in health education or a trip to the local dairy is not physical education, nor is a unit in basketball or wrestling health education.

Health Education Responsibilities of Physical Educators. The majority of physical educators in secondary schools and colleges and universities have important responsibilities in regard to the school health education program. Each must co-operate fully with the school doctor, nurse, or other medical personnel. Many physical education teachers participate in the administration of the medical examinations. Studies have shown that more physical educators teach the separate health courses than do any other teachers. A survey

by the Federal Security Agency revealed that in forty-two different states physical education and health education are taught by the same certified teacher.¹ All physical education teachers have the responsibility in their physical education classes for teaching health habits, health attitudes, and health knowledge whenever a favorable opportunity presents itself. Because of their excellent background, many physical educators serve as health counselors, particularly in the smaller schools. Finally, physical education and health education are combined into one department in many schools, and the physical education director has the responsibility for administering both programs.

Because of these important and varied relationships to the health education program the physical educator must be familiar with this important area. This is particularly true for the administrator in physical education who bears the responsibility for implementing all of the health education obligations of the department.

Changing Outlook on Health. Schools have broadened the scope of their programs considerably in the last half century. Modern philosophy considers that an educational institution is concerned with more than the intellectual development and vocational preparation of youth. Experience has clearly shown the inadequacy of an education which has been limited to only these objectives. Health has come to be considered one of the most important of the objectives of education. Health is too important to be trusted to individual or family initiative. Educators realized that whatever other objectives are sought, health aids in progress toward them. Health is basic to learning, to happiness, to success, to effective citizenship, and to worthwhile living. Without health, the individual is less effective than he might have been and is handicapped in everything he does. Some persons with poor health have made significant contributions to society, but these contributions have come in spite of their handicaps.

World War II greatly increased the importance of the health objective. The lack of health and physical fitness of American men and women was one of the major revelations of the war. The selective service medical examinations revealed all too clearly that insufficient attention has been given to health. Although some progress

¹ Federal Security Agency, *Health Instruction in the Secondary Schools* (Washington, D. C., Government Printing Office, 1951), p. 17.

had been made, the nation was shocked that we had profited so little from our experience in the previous war. Public opinion was aroused, and all health agencies accelerated and expanded their activities. The schools have responded to the challenge and are emphasizing health to a degree never before approached.

Modern concept of health. When educators first made a place in the curriculum for health, they regarded it only as physical soundness. An individual was ill when confined to his bed—otherwise, he was well. The emphasis was on freedom from disease and physical defects. As time passed, more and more was read into the meaning of health. It was found that a psychosis or neurosis was more detrimental to the health of an individual than flat feet and that emotional breakdowns were as serious as physical breakdowns. This broadened concept of health is expressed in the definition: *Health is considered that condition, mental and physical, in which the individual is functionally well adjusted internally as concerns all body parts and externally as concerns his environment.* This definition of health is positive; it means more than merely keeping out of the hospital. It implies a healthy organism and a healthy personality.

The Objectives of the School Health Program. The aim of the school health program is the development of optimum physical, mental, emotional, and social health among all pupils. The specific objectives which lead to the accomplishment of this aim are outlined by Anderson:²

1. A continuing appraisal of each child's health status.
2. An understanding of each child's health needs.
3. Supervision and guidance of the health of the children.
4. Development of the highest possible level of health for each youngster.
5. Prevention of defects and disorders.
6. Detection and correction of all defects and disorders.
7. Special health provisions for the exceptional child.
8. Reduction in the incidence of communicable and noncommunicable diseases.
9. In each youngster a positive health awareness and a desire for a high level of health.
10. Development of wholesome health attitudes.
11. Development of healthful personal practices.

² C. L. Anderson, *School Health Practice* (St. Louis, C. V. Mosby Co., 1956), p. 35.

12. Acquisition of scientific and functional knowledge of personal and community health.
13. Development of an appreciation of aesthetic factors related to health.
14. Development of a high level of self-esteem in each youngster.
15. Effective social adjustment.
16. Mentally hygienic school environment.
17. Establishment and maintenance of sanitary practices and surroundings.
18. Provision of emergency measures.

Organization of the School Health Program. Since health is so educational in function, it is very important that its supervision and control be centered in the board of trustees or board of education. In the past, many communities placed the responsibility for the public health work in the board of health. The board of health has the machinery for the control of communicable disease and can administer this phase of the program better than the board of education. Considering the educational aspects of the school health education program, the control should reside in the board of education, but there should be co-operation with all local groups interested and concerned with health.

The best way of bringing about school and community co-ordination and co-operation in matters relating to the health of the school population is through a community health council. This council should be composed of representatives of the schools, the local board of health, the county medical and dental associations, and all other public and private agencies concerned with health. The community health council concerns itself with broad policies and problems and mobilizes all the health resources of the community behind the school health program.

A health council or health committee should be organized, where possible, in each school. The function of the health council is to give guidance and leadership to the health education program within the school and to co-operate with the community health council through duly appointed representatives. Membership on the health council should include the principal, the school medical adviser, the health co-ordinator, various teachers, and student and parent representatives. If a school psychologist, nurse, nutritionist, and dentist are available, they should also be included.

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Every school must have a physician who will function as a school medical adviser. Small schools will be unable to afford a full-time medical adviser, but it will be possible for them to obtain one on a part-time basis. It is essential that every school have recourse to a physician to advise upon the many health problems which require medical judgment. In many communities where the school is unable to afford a paid medical adviser, the county medical society will frequently co-operate by contributing the part-time services of several physicians without charge.

There must be someone within each school who has a definite responsibility for the total school health program. This individual is known as the health counselor or health co-ordinator. Every school should have a health counselor or health co-ordinator. In the smaller schools and colleges the co-ordinator may be any instructor, head of department, or, in the case of high schools, the principal or superintendent. Regardless of the size of the institution, the best qualified individual should be in charge of the health program. The director of physical education is frequently the health co-ordinator. Educators have associated physical education closely with health values and objectives. Unless the physical educator is well trained for health education there is no justification for placing him in charge of the health education program. If he has been well prepared, however, he is in a strategic position to perform excellent service. Students usually esteem him highly and grant him great authority, particularly if he is the coach. He comes into close informal contact with the boys and thus gains a better understanding of their health problems and needs. The woman physical educator, too, can get closer to the girls than any other teacher. Innumerable opportunities occur in the physical education classes and intramural and interscholastic sports to protect, promote, and teach health. In the smaller institutions the physical examination is usually conducted by the physical education department. For these reasons the physical educator makes an excellent health co-ordinator in the small schools if he or she is well trained. Teacher-training institutions are providing much more adequate preparation in health education than hitherto, and in the future physical educators will be better qualified as health co-ordinators. In the large institutions the task of administering the physical education department requires so much of the director's time and effort that it is inadvisable for

him to undertake the additional responsibilities involved in directing the health education program.

The health co-ordinator. The success of the school health program depends to a great extent upon the health co-ordinator. He should have the following qualifications and training:

1. A strong basic science background, including physics or chemistry, biology, physiology and bacteriology.
2. A strong preparation in education, including educational psychology, principles of education, educational methods, curriculum construction, and tests and measurements.
3. Thorough preparation in the field of health, including personal health, nutrition, mental hygiene, first aid, health and physical diagnosis, and communicable disease control.
4. An understanding of the purpose and functions of all health agencies in the community, particularly the local public health organization.
5. An understanding of the nature and functions of the total school health program.
6. An appreciation of the potential contribution of all subject-matter fields and all other phases of school life to the total health program.
7. Training in special skills required in health education, including the methods and materials in health education, the evaluation of sources of material and information, the nature, preparation, and use of visual aids, public relations and publicity methods and techniques, and the nature of the printing and duplicating processes and their use.

The duties of the school health co-ordinator usually involve the following activities:

1. To assume the responsibility for developing and supervising the total school health program.
2. To co-ordinate the school health program with all pertinent agencies and individuals, including parents, public health agencies, family physicians, and the local medical society.
3. To interpret to teachers the results of physical, medical, dental, and psychological examinations of their students.
4. To assume the responsibility of the follow-up of medical and dental examinations.
5. To ascertain that the school physician's recommendations for special program for certain students are implemented.
6. To help secure the most effective utilization of the school physician's time.
7. To see that students needing special attention are referred to the school physician.

8. To assist teachers who have pupils or advisees with health problems.
9. To determine that students who participate in extracurricular activities can do so without adverse effects upon their health.
10. To check students who return to school after illness or injury and to assist in their readjustment.
11. To assume the responsibility for checking the sanitary environment of the school.
12. To analyze the health factors involved in truancy and excessive absence and to take appropriate action.
13. To maintain all health records of students.
14. To make arrangements early in the school year for screening tests for vision, hearing, and posture.
15. To secure publicity for the school health program and to see that all staff members are aware of the services available to them.
16. To give leadership to the health instruction program. This involves curriculum revision with all those who teach special health courses; preparation of syllabi; assistance in obtaining films, books, and health instruction materials; and provision of in-service training where necessary. It also means co-ordinating the efforts of all teachers whose courses offer excellent possibilities for correlating instruction.
17. To work out detailed procedures to be followed when accidents occur.
18. To assume the responsibility for the school safety program.
19. To set up procedures for the evaluation of the school health program.

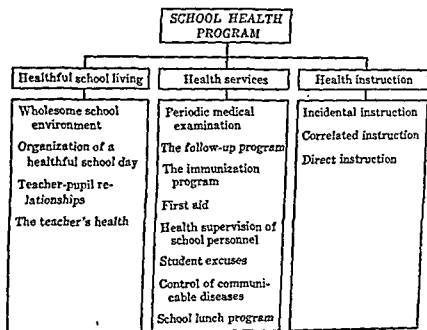
Personnel. Health cannot be effectively taught in two or three periods a week. The entire staff of the school must protect, promote, and teach health every day in every way if a genuine contribution to the health of the child is to be made. A health-conscious staff is essential to a successful program.

The health personnel may include physicians, dentists, dental hygienists, psychologists, psychiatrists, nurses, oculists, nutritionists, other specialists, and visiting teachers. There are no accepted standards as to the size of the staff, although physicians, dentists, and nurses are considered necessary. The size of the staff is dependent upon what the school board and the community want and are willing to pay for. It is desirable that all of the health staff have some educational training in order that they may have an educational viewpoint.

The Scope of the School Health Program. The major phases of the total school health program are: (1) healthful school living,

(2) health service and (3) health instruction. Although each of these major areas is discussed separately, it should be emphasized that all are so closely related as to form parts of one co-ordinated whole, and only by such co-ordination can a worthwhile program be developed. The relationships can readily be perceived on the following chart.

CHART 5
Co-ordinated Phases of School Health Program



HEALTHFUL SCHOOL LIVING

Meaning. Healthful school living is a more inclusive term, to be preferred to those which formerly designated this phase of school health education. This term refers to the entire environment which surrounds the pupil. It not only involves safe and sanitary facilities but also includes careful planning of the school day for study, play, and rest. Since teachers are also part of the school environment, the

establishment of healthful teacher-pupil relationships is an important aspect of healthful school living.

Wholesome School Environment. Every school is obligated to surround its students with a healthful environment: physical, social, and emotional. Intelligently planned, hygienically arranged, well-equipped school plants kept in a sanitary and safe condition are essential in the development and protection of child health. Construction and maintenance of the school building should be in accordance with standards established by law and by official building and health regulations. Adequate and well-arranged lighting and seating, properly functioning heating and ventilating systems, reliable equipment for fire protection, approved plumbing, suitable acoustics, adequate toilet facilities, and sanitary drinking fountains are some commonly recognized requirements for a healthful school environment. Furthermore, adequate handwashing facilities, hot and cold water, liquid or powder soap, and paper towels are all necessary for pupils as well as for teachers.

Standards for school sanitary facilities are established in building codes of state education departments and sanitary regulations of state health departments. These standards were determined by experts, and if they are up to date and adhered to within a school, the proper physical environment for children will be assured. The responsibility for sanitary inspections may be that of school nurse, school doctor, health officer, or sanitary inspector, principal or superintendent. In smaller schools, the health co-ordinator or superintendent may make the inspections.

The Organization of a Healthful School Day. The health educator has more control over the organization of a healthful school day than he has over the environmental conditions of the children. Any organization of the school day must be considered unhygienic if it overtaxes school children mentally or physically. Some of the factors which must be regarded by the health counselor are these:

1. The length of the school day.
2. The number and the length of the periods.
3. The student load.
4. The number and kind of study periods.
5. The placement of the activities.
6. The amount and kind of homework and the importance attached to it.

7. The number, length, and kind of rest and relaxation periods.
8. Extracurricular activities.

More high school and college students have had their health affected adversely by poor organization of the school day and unsatisfactory teacher-pupil relationships than by unhygienic surroundings. High school and college students need guidance in regard to the scholastic load they are carrying. They are frequently prone to undertake a heavy extracurricular load as well as other outside work. Some supervision is necessary to prevent them from undertaking too much. The extracurricular participation may be restricted, the scholastic schedule may be lightened, or, if possible, the outside work may be reduced if the student demonstrates that he is carrying too great a load.

The daily schedules of high school and college students should be such as to establish a regular program of work and insure sufficient time for meals, sleep, rest, exercise, and recreation. The college scholastic work should be limited to approximately eight hours per day or forty hours per week. The scholastic load should be about six hours per day in the high schools. Six periods of from 55 to 60 minutes are preferable to eight 45-minute periods. When the long period is used, there should be a "mid-period stretch" for several minutes. Part of the 60-minute period is used for supervised study, which tends to reduce the amount of homework. Five or six hours of home study per week is all that can be expected of high school students. When the 45-minute period is used, two of the eight periods should be devoted to study or activity periods.

Teacher-pupil Relationships. Every teacher in the school has a contribution to make to the health of the pupil. In addition to instructing and supervising the health of the students, the teacher can do much to promote health by his teaching methods. The methods of teaching are particularly important from the standpoint of mental hygiene. Too much stress should not be placed upon term examinations as a basis for promotion or final grades. The policy followed in regard to rewards and punishments should be considered carefully. Unwise disciplinary measures may have serious mental hygiene implications. The instructor should use fear as a last resort only to motivate desirable attitudes and conduct. Insofar as possible he should so conduct his classes that fear of failure, ridicule,

sarcasm, or embarrassment may not result. He must recognize that constant failure invariably causes poor mental hygiene. The instructor is confronted with many different personalities, and he cannot treat them all alike. Teachers who understand the principles of mental hygiene and put them into daily practice make an indispensable contribution to the health education program.

The Teacher's Health. The highest attainable health of the body, the mind, and the personality of every school child is the aim of the health education program. Such an aim could hardly be attained by unhealthy teachers. For years teachers were assumed to be healthy when, in reality, they were not. The school has as much right to demand physical fitness from its teachers as intellectual and moral fitness. Not only is it incompatible for a teacher in poor health to teach, but such an individual may even prove a source of contagion to the students. An unhealthy instructor is a health liability to an educational institution.

High schools and colleges have been giving more and more attention to the matter of the health of the instructional staff. In the past, the school itself was responsible for many of the factors which impaired the teacher's physical fitness. The heavy teaching load, the unhygienic lighting and ventilation of the school room, inadequate salaries, lack of rest rooms and rest periods, and dogmatic, destructive criticism were factors unfavorable to health. Other causes of ill health include hurried eating, insufficient recreation, poor living conditions, and lack of exercise.

The teacher's health may be promoted and safeguarded in a number of ways. Following are some recommended procedures for maintaining and improving teacher health:

1. Periodic physical examination, including a tuberculin test and a chest X ray for positive reactors.
2. Health qualifications for new teachers.
3. A reasonable teaching load.
4. Rest periods and rest rooms.
5. Recreational facilities for teachers.
6. Adequate salaries.
7. Insurance of salaries during illness.
8. Sanitary and healthful teaching environment.
9. Medical and hospital care for teachers.
10. Desirable, healthful living quarters for teachers.
11. Provision for health instruction for teaching staff.

12. Retirement fund for teachers.
13. Health insurance.
14. Teacher tenure.

SCHOOL HEALTH SERVICES

Nature and Scope of Health Services. This service program embraces the various protective measures assumed by the school to conserve and improve the health of children. The highest attainable physical, mental, and emotional health of every school child is the goal of the school health services program. The health services vary considerably in different institutions, but the minimum essentials of a good program include the following activities:

1. Health appraisal:
 - (a) The periodic medical examination.
 - (b) The periodic dental examination.
 - (c) Psychological examinations.
 - (d) Screening tests.
 - (e) Teacher-nurse observations.
2. The follow-up program.
3. Communicable disease control.
4. Emergency care procedures.
5. Health supervision of school personnel.
6. Student excuses.
7. Additional health services.

The scope of the school health services is limited in the curative and remedial field because of the noneducational aspects of this type of activity.

Health Appraisal. The total assessment of the health status of the school child is called *health appraisal*. Health appraisal is defined as "the process of determining the total health status of a child through such means as health histories, teacher and nurse observations, screening tests, and medical, dental, and psychological examinations."³ Not only do the physician, dentist, and nurse play a part in the health appraisal but the parent, teacher, and psychologist are also involved. The term *health appraisal* is a broader and

³ National Education Association and American Medical Association Joint Committee on Health Problems in Education, *School Health Services* (Washington, D. C., and Chicago, 1953), p. 7.

more comprehensive one than physical examination, health examination, or medical examination.

The periodic medical examination. The medical examination is that phase of health appraisal which is performed by the physician. A periodic medical examination is the very foundation of the entire health program, as health protection, health instruction, and health promotion are all dependent upon it. By determining the health status of every student, the medical examination may be used as the basis on which to plan the student's curricular and extracurricular activities or as a yardstick to measure improvement in health and to guard against impairment of health. Cases of communicable disease must be discovered in order that their transmission may be checked and treatment obtained.

The ideal program is one in which the examination is done by the family physician and the results reported to the school. The parents and pupils are thus taught that medical care and supervision are their responsibilities and not those of the community. In addition, the family physician is better acquainted with the pupil, and more time and opportunity are available for a thorough examination. Family physicians should employ the same examination record form which the school system uses.

The students who are not regularly subjected to an examination by their family physicians should receive one from the physician serving the school. If a school physician is not available there are usually some local agencies which can arrange to take care of the needy children. A recommended standard is a medical examination every three years. A minimum standard is one as a preliminary to entrance to the kindergarten or first grade and one at the beginning of the fourth, seventh, and tenth grades. Previously the recommended standard was an annual medical examination. Experience has shown that this standard was impractical. Those schools which were attempting to meet this standard were often providing such a superficial examination as to invalidate the procedure. Less frequent but more thorough examinations produce better results.

Qualified physicians and nurses should give the examinations, although the faculty and reliable students may assist in some of the routine details, such as weighing and measuring. The time of the physician should be devoted as much as possible to those aspects of the examination which cannot be done by anyone else. Women

physicians should examine the girl students. A satisfactory examination requires from twenty to thirty minutes for each student. A minimum of fifteen to twenty minutes of the physician's time should be given to each individual. The child should be stripped to the waist or clothed in a slipover. Privacy is essential if the fullest confidence of the student is to be secured.

Preliminary to the examination, all available health records of the student should be brought up to date and reviewed. Each pupil should have a cumulative health record throughout his school career. Excellent forms have been developed for this purpose. In addition to the data from the periodic medical and dental examinations, the cumulative record should include the family health history, the health history of the individual, his health habits and complaints, symptoms and signs of health disturbances which he reports, teachers and nurses observations of health, attendance record, and the results of all psychological tests.

During the examination, the physician should attempt to secure the confidence and the co-operation of the student. It is desirable, particularly in the elementary grades, to have the parents attend the medical examination. Every effort should be made to schedule the examination when parents can attend. They can help the examiner to obtain a better understanding of their child and his health habits. The parents will discover the health status of their child, and they can ask questions which have been troubling them. The educational aspects of the examination should be interpreted to the students and to the parents. The examiner will lose an invaluable opportunity if he fails to commend the student upon the favorable aspects of his health and his good health habits.

The medical examination should be quite complete. If a blood test or urinalysis is needed, it should be done privately. Both these tests are too expensive for most schools to provide routinely. Some provision should be made for detecting tuberculosis. Many schools administer the tuberculin test and X-ray the positive reactors. Schools can obtain specialized assistance from local, state, and national organizations devoted to tuberculosis control.

Participation in interscholastic or intercollegiate athletics should be contingent upon passing an adequate medical examination. The recommended standard is an examination of the participants prior to the beginning of each sport. The minimum standard is an

examination once each year with a re-examination for those who have suffered a disabling injury or illness. The general examination which is ordinarily given to students is not thorough enough for athletes. The medical examination of athletes should include an examination of the heart, pulse, and blood pressure before and after exercise, the lungs, bones, joints, and the inguinal and umbilical region for hernia. A urinalysis is strongly recommended. A tuberculin test, followed by an X ray for the positive reactors, should be required.

The periodic dental examination. The periodic dental examination is another essential aspect of the health appraisal program. This should be started in the preschool period and should be continued after children start in school. Early dental care will enable the dentist to discover and correct conditions before they become serious. At the time when children's temporary teeth are being replaced by permanent teeth and when they are so susceptible to dental caries annual visits to the dentist are recommended.

The school's responsibility in regard to dental health involves the encouragement of children and their parents to see their dentist at regular intervals. It also includes, in many communities, the conduct of dental inspections. A dental inspection is not so complete as a regular dental examination in the dentist's office, but it does serve the purpose of discovering dental conditions which require correction. Many schools routinely provide dental inspections, but others do not. Dental hygienists often administer the dental inspections. The trend is definitely to place the responsibility for dental treatment upon the parents. Special arrangements are usually possible for the children of destitute families.

Psychological examinations. Another important aspect of health appraisal is related to the mental and emotional health of the pupils. This is a significant aspect of health and one which must not be neglected. Tests of intelligence, reading, social adjustment, personality, and attitudes toward school and other children are very helpful in providing additional data which relate to the health of children. In addition, the classroom teacher is able to report anecdotes, particularly of those children who deviate from the normal. The school administrator, psychologist (if one is available), counselor, guidance teacher, social worker, health educator, physician, and nurse may have valuable data to add to the cumulative health record in regard to the mental and emotional aspects of health.

health defects, such as squinting or excessive blinking of the eyes, discharging ears, granulated eyelids, earache, inattention, and the like, which the teacher must learn to recognize.

If the teacher observes some signs of disease or health defect, she should take the case to the school physician, the school nurse, or the principal. Every school should have some individual who can make a more thorough examination of the suspected cases and authorize them to be sent home or to remain in school. The teacher should never be expected to make the decision as to whether or not the pupil should be excluded from school. When the individual is sent home from school, the parents should be notified of the reason. They should be urged to secure medical attention, and the nurse or visiting teacher should ascertain whether the services of a physician have been obtained. When the student is able to return to school, he should have a certificate to that effect from his doctor. It is recommended that the students be examined also by the school physician or nurse before being readmitted to class. The control of communicable disease is made more difficult in schools where undue emphasis is placed upon perfect attendance. The real tribute belongs to the child who protects his classmates by staying home when he does not feel well.

The Follow-up Program. The value of a medical examination depends in a large measure on the follow-up program. In too many institutions the results of the examinations are recorded, filed, and forgotten. The number of defects which are corrected after the examination is far more important than the number of defects discovered by the examination. In regard to the correction of defects there are two principles which must be recognized:

1. No school health service must take away the fundamental responsibility of the parent.
2. Any corrective work must be made an educational procedure.

The school is an educational institution, and not a hospital or clinic. The school is not prepared for curative or remedial services and should minimize its activities in this field. The responsibility for the treatment of defects and disease rests upon the family. The school staff should render first aid in emergencies and then call for the services of the family physician if further attention is needed. The only corrective work to be undertaken by the school must be

educational in nature. Adapted or corrective physical education falls into this category. The department of physical education provides corrective classes in which those individuals with physical defects and organic disturbances which are amenable to correction by physical modalities are given certain exercises or activities to remedy their condition. Instruction and practice in various recreative activities in keeping with the individual's defect are also given. —

If the parents are unable to be present at the medical and dental examinations, they should be notified by letter of the findings, and suggestions should be made concerning future examinations, treatment, and care. It is well to invite the parents to visit the school and confer with the school physician on the examination results. Instead of sending a letter, the school nurse may visit the home and report and interpret the results of the examination and the recommendations of the examiner. At school, the results should be interpreted to the students and their individual needs pointed out.

The teachers should be informed of the health status of their pupils and the steps which should be taken to remedy the defects. Teacher-nurse conferences should be regularly scheduled. They are usually most valuable if devoted largely to review and exchange of information regarding specific cases of children who seem to be in serious need of medical care, follow-up, or special study. The fully informed teacher can be most helpful both in adjusting the classroom program to the student's needs and influencing him and his parents to obtain correction of the remediable conditions as recommended by his family or school physician.

The correction of all remediable defects found on the medical and dental examinations is the chief purpose of the follow-up program. When the family cannot or will not assume the responsibility for correcting the defects, the school should bring the fact to the attention of public health authorities and social agencies. All agencies contributing to child health should be co-ordinated and their services brought to the attention of those families who are unable to pay for the attention of a physician. The school nurse or the visiting teacher is usually in the best position to make the arrangements between the family and the welfare organization.

Communicable Disease Control. The local health officer is the legal representative of the state board of health which has full power in the control of communicable disease. He consults with the private

physician when the illness affects the community or school. He informs the schools concerning the current rules, regulations, and policies for the control of communicable disease. He plans jointly with the school administrator for the immunization and testing program, in co-operation with the private physicians in the community. He advises school officials concerning the exclusion from school of pupils or teachers because of exposure to or presence of communicable disease.

The superintendent or principal is responsible for giving the school staff adequate interpretation of the most recent public health practices and for developing for their guidance procedures that are based on these practices. Written and printed instructions with reference to the teacher's role in communicable disease control should be placed in the hands of every teacher in the school. The school administrator collaborates with the private physicians and public health officials in formulating plans for the schools. He also keeps parents informed about the school's policies and procedures, usually by letter and group meetings.

One of the most important considerations in communicable disease control is the immunization procedures which are employed. It is a recognized fact that artificial immunization through vaccination is highly effective against smallpox, diphtheria, tetanus, whooping cough, and polio. Despite this fact, a large portion of the school population is unprotected against these diseases. If the immunization program operated as it should in the preschool years and in the elementary schools, the problem of immunization in high school and college would be reduced considerably.

Parents should be encouraged by every means possible to have their children immunized by their family physician in their preschool years. It is recommended that the smallpox vaccination be administered to children before their first birthday. The diphtheria, whooping cough, and tetanus immunization is recommended for children from three to six months of age. This can be done at one time by means of the triple antigen, which provides protection against all three diseases simultaneously.

The practice of postponing these protective procedures until the children enter the elementary school should be strongly discouraged. The public must be educated to the value of artificial immunization and the necessity of having it done early. The real facts should be

placed before the public through the newspapers, school publications, letters, visits by the school nurse, and parent-teacher meetings. Religious objections and ignorance are the chief foes to be combated. The schools should co-operate with the public health program of promoting immunization.

As each child enters the elementary school his needs in regard to immunization should be determined. The necessary information is obtained from the family physician on a form which is sent to the parents. Some children will not have had any previous immunization. Those children which have been previously immunized will require booster injections. Whatever the needs of the children are follow-up procedures will be necessary to see that proper immunization is obtained. Parents are expected to assume this responsibility through their family physician. When the family cannot afford this expense public health or social agencies are available to handle it. Some colleges and universities give vaccinations as part of the service for the student health fee. Others make no charge for it and vaccinate those needing it as part of the entrance examination. During epidemics the public health agencies or the school usually furnish emergency inoculations.

Emergency Care Procedures. All schools should be prepared to render first-aid treatment in the emergency situations which occur so often. The school doctor should prepare detailed instructions and standing orders for the guidance of the teachers and nurse with reference to the procedure in handling common school emergencies. The school doctor or nurse should administer first aid if it is needed. If they are not available, first aid should be given by some member of the teaching staff who is qualified to do it. All teachers of physical education, shop, health, driver-training and safety education classes should be certified in Red Cross first-aid training. In the event of a serious accident, the school doctor or any other physician easily and quickly obtainable should be called immediately. The names, addresses, and telephone numbers of nearby physicians who may be called in emergencies should be posted in the principal's office.

After first aid has been given, the parents should be tactfully notified of the child's accident. The parent should indicate what hospital, physician, or home address the sick or injured child should be taken to if the parent himself cannot promptly call for the child. The sick or injured child should never be sent home unaccompanied

by a responsible person. If the parents cannot be reached, the family physician should be called. There should be on file in the school the name of each pupil's family physician, whose notification in case of emergency has been authorized by the child's parent. The best-qualified individual should be prepared to help an uncertain parent decide what is next to be done for the child. All school personnel should clearly understand that they should not go beyond first-aid treatment of an accident or illness. They should not diagnose or administer medication of any kind unless prescribed by a physician.

Health Supervision of the School Personnel. The importance of a healthy school personnel has already been pointed out. The school health service has the responsibility for supervising the health of the teachers, the custodians, the secretaries, and others who come into contact with the students. The medical examination should be given annually for the school officials as it is for the students. The follow-up program for the correction of defects should be carried on among the teachers and custodians as vigorously as among the students. A complete medical examination should be a prerequisite to a position in any educational institution. It is of particular importance to inspect carefully for signs of tuberculosis. The school personnel must be closely supervised during any illness and should be prevented from coming into contact with the students as long as there is danger to them.

Excuses. The problem of excuses arises chiefly in connection with physical education classes. A written excuse by a physician should be the customary method of excusing students from classes. Whenever possible, the school physician should be the only individual authorized to grant excuses. Many unjustifiable excuses have been requested by family physicians. In order to reduce unwarranted excuses to a minimum, the family physician should be requested to write out the reasons why the students should be excused. The school physician should then review the validity of the excuse and in case of doubt require the family physician to prove his point. When family physicians know that their excuses are subject to the approval of the school physician, they will hesitate to grant unjustifiable excuses. Whenever excuses are granted, their duration should be indicated.

When the problem of excuses develops the cause may be that the program is so poor that it does not deserve the support of the physician.

Another reason may be that many physicians do not understand the nature and purposes of the program. If this situation prevails it should be rectified. The physicians can be readily approached through the local medical society. The orientation of the physicians should preferably be made by the school medical adviser if one is available.

Additional Health Service Activities. The administration of the school lunch is an important responsibility of the school health service in high schools. The school lunch provides a splendid opportunity to teach and inculcate proper habits as well as to supervise the diets of students suffering from malnutrition. The granting of work permits by the school physician is another health service measure which should be carried out in the high schools. Such a procedure is necessary to prevent students from undertaking more than is good for their health.

All colleges and universities should provide adequate medical service for their students. This is the only satisfactory method of assuring proper medical care for students who are away from home. The parents need assurance that their sons and daughters will be properly cared for in illnesses. The student health service and infirmary care should be definitely provided by all colleges, but the best opinion is agreed that strictly therapeutic work should be referred to physicians and specialists practicing in the community. The average cost of student health service in colleges is \$14.00 a year. This expense is usually met through student fees and extra charges for special services.

HEALTH INSTRUCTION

Meaning and Purpose of Health Instruction. The third phase of the school health program is health instruction. This term means what it implies, namely, instruction in health. Students learn a great deal about health from the health service and healthful school living phases of health education, but the term *health instruction* is used to define the effort to promote understanding of health and the observance of desirable health practices. The fundamental purpose of health instruction is to equip the students with sufficient knowledge about health to enable him to attain and maintain, both in attitude and practice, the highest possible level of health.

Importance of Health Instruction. Health instruction is an important means of bringing about healthful behavior among all people. A healthful environment and excellent health service in themselves will not solve all our health problems. Every individual must make countless decisions which affect not only his own health but the health of others about him. Many health objectives depend upon the understanding co-operation of all people. Thus, every individual should be capable of intelligent self-direction in matters related to personal and community hygiene. As far as possible everyone should possess a scientific attitude toward health and conduct himself in accordance with recognized scientific knowledge.

Ignorance, indifference, and prejudice need to be combated as vigorously as sickness and disease. The outstanding problem in the prevention of disease at the present time is not the accumulation of more knowledge about disease but the putting into practice of the now available knowledge of disease prevention and control. The failure of many people to employ immunization procedures is an example. Many physical defects developing during childhood, such as those involving hearing, sight, posture, nutrition, including dental decay, could be prevented in large part by intelligent health behavior. A scientific attitude toward health is needed to break down superstitions and fads and to counteract the misleading advertisements in newspapers, in magazines, and over the radio and television.

The Health Teacher. According to the definition given of health instruction, this term is to be used to define that time and effort given in class to promote an understanding of health and the practice of health habits. Obviously, in a broader sense, the child learns of health through other classes. In this sense, health instruction is a responsibility of the entire faculty.

The health instruction in the elementary school grades is usually considered as best left with the regular grade teacher. She should be as well prepared for this task as she is prepared for arithmetic, reading, or any other subject which she teaches. This is not usually the case, although in some states certification requirements insure adequate preparation. The junior and senior high school teacher should be especially trained for this particular subject. The practice of having the coach or physical education teacher teach this course is to be condemned unless he has had special preparation. The physician who does not have an educational background is likewise

unprepared to teach health. *Special training in anatomy, physiology, hygiene, health education, bacteriology, psychology, mental hygiene, educational psychology, and teaching methods is recommended.* Many times in the small school no faculty members has received such training. This condition requires the selection of the best prepared individual for the position. In some schools it may be the general science teacher, the physical educator, or the school nurse. Care must be taken to select a teacher who is interested not only in his particular field but in teaching health. Unless the teacher has enthusiasm for his subject, he will be, at very best, a mediocre teacher. Inasmuch as in health instruction there should be a correlation of this subject material with the other subjects in the curriculum the health teacher not only should have had additional preparation but must have a certain amount of co-operativeness, a pleasant personality, and administrative ability in order that these necessary correlations may be made without conflict between faculty members or departments.

Time Allotment. In the first three grades the teaching of health is carried out largely through a correlation of health with the other subjects in the curriculum. However, an average of at least two periods per week should definitely be devoted to health instruction. In the upper elementary grades this correlation is continued, but, in addition, three periods a week should be devoted specifically to this subject. *Specific health courses should be required in the secondary schools with a minimum time allotment of a daily period for one semester either in the ninth or tenth grade and a similar amount of time in the eleventh or twelfth grade. Six semester hours have been recommended by the National Conference on College Hygiene as the ideal time allotment for colleges and universities.* The minimum time devoted to health should not be less than two or three semester hours. Most institutions of higher education require such a course.

Many schools are not giving proper emphasis to health instruction. One of the most pernicious practices is to use part of the time allotted to physical education for health instruction. This is sometimes done when inclement weather prevents outdoor physical education activities. In some schools one period per week of the physical education time is given over to health instruction. Other schools do not have a specific time allotment but attempt to teach

15. Each child is unique, learns at his own rate and in his own way, and thus a variety of activities and materials is essential.
16. Accompanying, incidental learning always takes place, and teachers should be alert for opportunities to make each learning experience yield greater returns in learning.
17. Health work in the school cannot be fully effective unless integrated with the life of the home and the community and the forces in both which can contribute to the child's education.

Scope of Health Instruction Program. The health instruction program should not be thought of as being limited to the formal health course. Two other aspects of health instruction are recognized as important. These are the incidental instruction and the correlated teaching. The incidental health instruction is that which arises naturally in various contacts with students. In such associations situations develop which enable the instructor to give guidance relative to health matters. The student may come to the physical educator with a personal health problem about which he solicits advice. As a result of his close, informal relationships with students the physical education teacher frequently discovers students who need health advice. The report of each student's medical examination provides an exceptionally good opportunity for incidental health instruction.

Correlation. Interest can be aroused and health habits motivated by the ways in which health is taught. In addition to being taught in a definite course devoted to the subject, health should be presented in all of the other school subjects. When health is taught daily in connection with the sciences, the social studies, physical education, and other fields, with definite objectives to achieve and precise content to cover, the process is known as correlation. The practice of teaching various aspects of health in other school subjects has been long advocated by leaders in the field of health education. In addition to the value of increased interest, it presents an opportunity to bring out essential health information in what might be a more natural setting and thus give the student a better understanding and appreciation of it. If the faculty member directly responsible for the health program is well trained and is given proper co-operation by the entire teaching staff, a large amount of factual health knowledge can be presented through established subjects in the curriculum. Health instruction is to be looked upon not as a responsibility of the health

teachers alone but as a joint responsibility of the entire faculty. Too many times no practical application to the field of health is made by the other teachers.

In the junior and senior high school the health co-ordinator is usually responsible for the direct instruction if there is a separate time allotment and for the integration of health with the other subjects in the curriculum. In colleges and universities the health administrator or health co-ordinator is responsible for the correlations, but he may assign this task to one of his assistants.

There are obvious criticisms of the attempt to teach health only through this correlation method. The courses with which health is chiefly correlated may not be elected by the student. The general science teacher, the home economics teacher, and other instructors are interested chiefly in their subject and may not be particularly interested in emphasizing the material relating to health. The health co-ordinator should be able to show the various other members of the faculty how these correlations can be made in a perfectly normal way, and the program should be worked out so that duplication of factual material be minimized as far as possible.

The health course. On the junior and senior high school levels and in colleges and universities formal courses in health are essential. Even though some health may be effectively taught through incidental and correlated instruction, invariably important areas will be omitted. In addition, such a course is needed to provide students with a unified, integrated presentation of the health materials which are related to their needs.

Health instruction in the elementary schools. In the elementary grades, health instruction is the responsibility of the classroom teacher. In the primary grades a daily period of health instruction is not essential, but a minimal time allotment would be two 30-minute periods per week. In the intermediate grades three periods of substantial length are needed. It should be stressed that incidental and correlated instruction, of which there is a good deal in the elementary grades, should be over and beyond this time allotment. Another important consideration is that when teachable moments arise the teacher may spend considerably more time on health instruction than usual.

In the elementary grades, the emphasis is placed upon the development of desirable habits and attitudes toward healthful living.

The scientific facts upon which habits and attitudes are based should not be stressed. The instruction should be informal and should grow out of the daily experiences of children. The methods of instruction include discussion, projects, exhibits, demonstrations, construction, oral reports, dramatization, and field trips.

A number of studies have provided insight into the health needs and interests of elementary school children. These indicate that the major emphasis in the primary grades should be given to such aspects as developing habits of personal cleanliness; caring for teeth, eyes, ears, and nose; proper eating habits and choice of foods; developing proper attitudes toward physical and dental examinations; preventing colds, skin disease, and other infections; wearing appropriate clothing; and acquiring habits of safety. In the intermediate grades instruction can be continued on many of the above items but on a more advanced level. Other aspects which may be covered include prevention of infections; nutrition; fire prevention; traffic safety; safety measures in school, home, and playground; rest; getting along with adults; simple first-aid procedures; and purification of water and milk.

Health instruction in the secondary schools. In the secondary schools, an increasing emphasis should be given to health knowledge. The development of proper health habits, attitudes, and knowledge should proceed concurrently. Experience has clearly shown that the relationship between health knowledge and health behavior is not high. Most people with unhealthy habits really know better. The problem is one of proper attitudes. The correct feelings and emotions must be taught along with the health facts. The teacher who knows his students and his health materials can guide the learning experience so that the feeling and ideas become appropriately associated in the learner. When satisfaction accompanies proper behavior and dissatisfaction the improper behavior, correct attitudes will be developed, particularly if the satisfaction and dissatisfaction come immediately.

A number of studies of health interests of secondary school students have been made. Lantagne, in a study of the health interests of 10,000 secondary school boys and girls, reports the leading health interests as follows:⁴

⁴ Joseph Lantagne, "Health Interests of 10,000 Secondary School Students," *The Research Quarterly* (October, 1932), pp. 342-343.

BOYS

<i>Health Interest</i>	<i>Per Cent Interested</i>
1. Sex instruction	65
2. Safety in water	64
3. Tobacco and human health	61
4. How to use a gun properly	60
5. Sports vs. apparatus activity	58
6. Atomic warfare	58
7. Juvenile delinquency	58
8. Speed and accidents	58
9. Cancer	56
10. Causes of suicide	55
11. Problems of tooth decay	54
12. How to report accidents	51
13. Hit-and-run drivers	51
14. Drunken driving	50
15. Lifelong care of eyes	50
16. Problems of alcohol	48
17. War and disease	47
18. Causes of mental illness	45

GIRLS

<i>Health Interest</i>	<i>Per Cent Interested</i>
1. Sex instruction	70
2. Juvenile delinquency ..	67
3. Cancer	64
4. Causes of suicide	64
5. Preparation for marriage	64
6. Safest age to have a baby	64
7. Causes of mental illness ..	64
8. Jealousy	60
9. Sunburn	58
10. Pregnancy and health ..	58
11. Deaths of mothers in childbirth	57
12. Problems of tooth decay ..	57
13. Lifelong care of the eyes ..	56
14. Communicable diseases ..	55
15. Ability to have children ..	54
16. Cancer is inherited	54
17. Tobacco and health	54
18. How to report accidents ..	51

This survey revealed that most of the items of greatest interest to boys were also of greatest interest to girls. Girls were more interested in problems such as menstruation, childbearing, personal appearance, and nutrition. Boys were more interested in driver safety and physical activity.

In a study of interests of high school boys in the Denver public schools the items of least interest included:⁴

1. Drawing a diagram showing the structure of a tooth.
2. Making a list of safety rules.
3. Preparing a chart on the kind of accidents that happen in your school.
4. Making posters of food found in a well-balanced diet.
5. Constructing a chart showing how city departments keep people well.
6. Drawing a diagram of the circulation of the blood.
7. Listening to talks on vitamins.
8. Learning the names of the bones of the body.
9. Hearing a talk by a nurse on how to take care of the sick.
10. Studying about health helpers in the community.

⁴ Adapted from Denver Public Schools, *Health Interests of Children* (Denver, 1947), pp. 112-119.

Methods of Teaching Health. One of the most common criticisms of health teaching is that the subject lacks interest. This criticism has been made by elementary, and junior and senior high school groups as well as by freshmen in college. It has been due, no doubt, in the past in large part to insufficient training of the health instructor and too much duplication of teaching material. Many school principals, superintendents, and other faculty members still think of health in terms of washing the hands before eating, brushing the teeth three times a day, and drinking six or eight glasses of water daily. Although some of these facts have some value, one can hardly expect interest if they are taught in the elementary grades and again in the junior and senior high school and college. If the health course is to appeal to students, their interests and needs must be considered in the selection of subject matter. These needs and interests are constantly changing; and unless the health instruction is modified and adapted to them at the different school levels, this subject will always prove distasteful and uninteresting. There is also the tendency to base the instruction predominantly on adult needs and interests. While these are important, it is extremely difficult to interest students in health problems which are thirty to forty years away. The best procedure is to follow the middle path and to consider both present and future needs and interests.

In the past the lecture was used predominantly in health education courses, but the trend at present seems to be a combination of the lecture and textbook method. The use of the textbook is a highly desirable method of teaching hygiene, for it results in greater student activity and application. One of the drawbacks to using a textbook has been the scarcity in the past of good publications in this field. Health texts not only must be well written, interesting, and nontechnical, but they must include the latest developments in all phases of health. There are constant changes occurring in the subject matter covered in health education, and regardless of how good a book may be today, it may be out of date soon. Fortunately, there are available at present a number of excellent publications, and with the increased interest in this field it appears likely that there will be no lack of good health textbooks in the future.

Through the use of well-selected health films, slides, and posters an otherwise uninteresting health course may be made interesting and certainly much more valuable. There are health films available

at the present time for elementary, junior, and senior high schools presenting material in an interesting way and including material that many times would be impossible or at least very difficult to present by ordinary class methods. Health films and slides, however, are not to be looked upon as a teaching method but as a teaching aid. Most of the large colleges and universities have a visual education unit by which these films and projectors are made available to schools throughout the state by payment of a small rental fee. Slides are available from the same source. The teacher sufficiently interested, with a small amount of training and very little material, should be able to make his or her own collection of slides. Posters are available from most of the national associations, such as The National Safety Council, the National Tuberculosis Association, the National Society for the Prevention of Blindness, or the National Society for the Control of Cancer. The materials presented by these associations are authentic, and the teacher should not neglect these sources.

The use of class demonstrations is a very effective means of presenting health facts. The teacher should have received sufficient training in health so that various simple experiments may be carried out. The growth requirements of bacteria, their wide distribution, the effects of drying, sunlight, boiling, and pasteurization on them can be easily demonstrated. A comparison can be made of the bacterial count of raw milk with that of pasteurized milk or of river water with tap water. The size and the shape of various types of bacteria can be easily shown by the staining of these organisms and by the use of the microscope. Simple feeding experiments carried out as a class project would be an interesting and worthwhile method of presenting certain facts in this field. There are many other simple, inexpensive demonstrations which may be made. There are on the market various health workbooks and laboratory guides which should be of value to the teacher for class demonstrations.

In every community there are various class trips that can be taken which should add interest and value to health instruction. A visit to the sewage-disposal and water plants will create more interest in municipal health problems than will ordinary classroom instruction. A visit to some good dairy to show modern sanitary methods of processing milk and to a farm where precautions are not taken should be interesting and valuable. The health teacher should take

every opportunity of utilizing those facilities available in the community.

Graphic materials, such as wall charts, are a great aid in teaching health. Some universities and colleges are able to use human cadavers and specimens to facilitate instruction. Many departments use health habit inventory charts as a means of bringing the desirable and undesirable habits before the students. In junior and senior high schools an excellent device is to put on a health exhibit.

Safeguarding Health. All teachers are responsible for protecting the health of the school population. The physical education teachers' obligations in this regard are more difficult to discharge, however. In the service, intramural, and interschool programs there are many potential hazards to the health of students. Adoption of the following policies would do much to eliminate such dangers.

1. *A medical examination should be a prerequisite to participation.* No student should be permitted to participate in the physical education program unless his physical status permits it. An annual medical examination is a necessity for all students participating in the interschool athletic program. A school medical examination within three years should be a prerequisite for participation in the service and intramural programs. It is recommended that the hearts of intramural participants be checked each year. Intramural activities are often very strenuous, and the greatest danger is to the heart. This phase of the medical examination would be relatively simple to administer.

2. *Proper physical conditioning should precede intensive participation.* Intensive participation in physical education activities should be preceded by a gradual, progressive physical conditioning program. This is particularly important in the interschool program but applies also to the intramural and service programs. This policy has been most frequently violated in intramural athletics.

3. *A physician should be in attendance at all football games, wrestling meets, and other contests which have a high incidence of injuries.* Ideally, schools should also have the doctor available during practices. If this is not possible, arrangements should be made whereby he could be reached quickly.

4. *An adequate warm-up should precede all participation in vigorous sports and games.* Many injuries are caused by the failure to observe this precaution.

5. *Medical approval should be required for participation after illness or injury.* A student who has been absent from school because of serious illness or injury should, before he resumes participation, present a statement from a doctor which indicates that he is physically fit to participate.

6. *Unsanitary practices should be eliminated.* Many unsanitary practices are permitted in physical education, particularly in interscholastic athletics. The common water bottle, towel, or sponge is still frequently used. The practice of sliding a towel across the floor is not uncommon. Athletic clothing is interchanged among students. Clean equipment is not required. The practice of expectorating on the floor is not prohibited. In some schools, shower facilities are not available. The continuance of such practices is a denial of health as a physical education objective.

7. *Special provision should be made for students who have physical disabilities which prevent them from participating in the regular program.* These students should be assigned to remedial classes or to classes in modified activity. Such handicapped individuals are in greater need of physical education than normal students.

8. *Activities should not overtax the physical capacities of immature students.* Physical education activities which place a heavy demand upon endurance are contraindicated for elementary and junior high school students.

9. *Students must be protected from constant failure and too much easy success in physical education activities.* The physical educator must protect the student from injury to his personality and emotional adjustment just as much as he must protect him from physical injury. He should help students recognize their powers and limitations. He must watch that no student withdraws into himself too much. He should see that everyone is a member of a group—that no one is rejected continuously.

10. *Adequate medical and hospital care should be provided for injured athletes.* In many schools such medical care is paid for by the school or is covered by insurance. Ideally, such coverage should also be provided for students injured in the instructional and intramural programs. However, few schools can afford such a service.

11. *Suitable protective equipment should be provided every participant.* Many injuries in physical education are due to inadequate protective equipment. This is particularly true in rugged, contact

sports, such as football, soccer, lacrosse, rugby, ice hockey, and wrestling.

12. *Competition should be arranged between teams and individuals of comparable ability.* This is particularly important for competition in the rugged body-contact sports where the possibility of injury is greatest. This policy applies equally well to competition in the service and intramural as in the interschool program.

13. *Interscholastic boxing should be prohibited.* The American Association for Health, Physical Education, and Recreation and the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association have gone on record as opposed to interscholastic boxing. Boxing is an extremely hazardous activity and its dangers are out of proportion to its possible benefits. Blows to the head may cause injury to the centers of the brain that regulate memory, speech, self-control, and the power of reasoning which can result in loss in mental power and physical co-ordination. Such injuries may occur to a novice in his first contest or to an experienced boxer. They may occur without a "knockout" or a skull fracture.

14. *Equipment and facilities should be maintained in a safe condition.* Slippery floors, extraneous objects on the floor, uneven playing surfaces, unsafe equipment, and equipment which does not provide adequate protection are all common causes of injury.

15. *Capable officiating should be provided.* Incompetent officiating is recognized as one of the most important causes of injury in athletic competition.

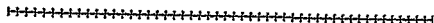
16. *Trained, competent, careful leadership should be available.* Many accidents occur because of the carelessness and lack of supervision of the instructor. In the last analysis, this is the most important factor in safeguarding the health of pupils.

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The Physical Education Plant



Need for Familiarity with the Problem. There are very few principles of physical education administration that have been less adequately applied than have those that deal with the planning and construction of buildings to house the program. The large number of inadequate physical education buildings, even on university campuses, is material evidence of this fact. Several factors have contributed to this condition. One of the most significant has been the practice of copying a building in a neighboring city or state, mistakes and good points alike. This practice has been employed because it has proved to be temporarily less troublesome than making a survey of local conditions, a study of building construction, and evaluating the results by a sound educational philosophy, before starting to build. Another factor has been a change in educational philosophy and a consequent shift in emphasis from a formal to a more natural activity program. The newer program demands more and different activity rooms, which tends to make the older type of plant obsolete. In some situations there has been an unwillingness on the part of those in authority to seek and utilize the advice of informed staff members, and in others physical education people have proved unable to advise judiciously when consulted.

Wise and efficient planning and construction of a physical education plant can obviate many administrative, financial, and functional difficulties. A few examples of this are presented here and again later, since they deserve to be emphasized by repetition. Direct stairs from locker rooms to gym floor and a small visitors' balcony will eliminate the problem of keeping students in street shoes off the gym floor; well-placed activity rooms will make supervision relatively easy; properly recessed radiators will reduce the number

of accidents; reduction of unnecessary hall space will save money; properly placed drinking fountains and lavatories will make the building a more efficient service unit; properly sloped cement floors will be easier to clean; a sloping roof will shed water much better than a flat one; louver type windows will provide good ventilation, even in rainy weather; cement locker bases will make the cleaning of the locker room easier; and the concentration of showers, lavatories, and drinking fountains in a comparatively small area will reduce the plumbing bill. Any effort spent in planning will pay large dividends in the future to those who are responsible for the physical education unit. It is not enough to hire an architect and leave all matters of arrangement to him, for he does not have the background or philosophy which the competent physical educator has. The one who is to plan an efficient unit must understand the program it is to house. Certainly an architect is necessary, but he must be guided in order that the finished building may be an adequate service unit as well as a thing of beauty.

We have probably reached a point in the construction of school buildings where the public is going to be more and more critical of the method by which its tax money is spent. This means that the builder of tomorrow will need to plan very carefully in order that he may provide an efficient physical education unit with the somewhat limited funds available.

Location of Building. For small communities this is determined at the time the site of the school is selected, for there is often but one building to house the entire school. For somewhat larger schools, where the buildings must all be placed in a limited area, the matter of placement of the physical education building is of relatively small significance; but for large schools, especially colleges and universities, the location of the building or buildings often sets quite definitely the limits of their serviceability. At some universities the fieldhouse, physical education plant, or playing areas are so far removed from the major concentration of classrooms that in many instances students must rush to and from academic and activity classes. This need to hurry tends to make physical education an unpleasant experience for the student. When the activity areas are far removed from the living quarters students who lack transportation are handicapped in their efforts to participate in intramural competition because it is a workout to travel to and from the area.

Since the participant must take two workouts or none, quite a number of them will choose none rather than two, especially on those occasions when the weather is bad or there are other events competing for their time. These absences can be a major cause of forfeitures of intramural contests, and the anticipation of the problems involved in traveling back and forth may account for failure to sign up for participation in the first place. Since the physical education plant is a service unit, it should be located in a pleasant environment on a properly drained site near the center of the campus where all students may find it readily accessible when they have an hour or two for physical activity. A well-constructed physical education plant does not mar a landscape, but instead enhances it. Beautiful grass and shrubs are poor substitutes for normal, healthy students in any case. If the school does not provide a convenient recreational unit, outside interests will replace recreation with commercialized amusement which is socially and financially less valuable.

Room Dimensions. The size, shape, and height of rooms will vary according to the purposes for which they are to be used; consequently, it is not possible to determine the optimum dimensions without knowing the local conditions which will affect them. However, there are general limits which should be observed, except in rare cases when some specific modifying factor dictates different proportions. In case of doubt moderation rather than extremism is a sound policy to follow in planning size of rooms.

This is particularly true of size, since too large a room is proportionately more expensive in terms of service it can render per unit cost. There are but few occasions when such a room can be used to capacity, and all idle, enclosed space represents an unwarranted financial burden. Then, too, more teaching stations can be provided if the enclosed space is broken into smaller units. Except for ticket booths, toilets, closets, offices, and rooms of that type, very small rooms are not particularly serviceable, for they must, of necessity, remain idle much of the time. Those smaller than 12 by 15 feet are hard to justify. The building should be constructed in such a way that it will contribute most to the entire educational system. Sliding walls will provide for varying room sizes. This point of view will limit extravagant expenditure of funds for construction of extra-large seating accommodations for basketball crowds, which will be needed on only a night or two a year when a particular rival plays on the

home floor. The chief function of the plant should not be that of providing seats for spectators but of providing a laboratory for training citizens.

Roll-away bleachers, which can be pushed back when not in use, thus leaving more space for activities, are strongly recommended instead of the old stationary bleachers.

Odd-shaped, many-sided rooms with projections are costly to construct and are limited in their uses; consequently, they should be eliminated as much as possible in the planning. The main gymnasium room or basketball court should be approximately one and a half times as long as it is wide. This shape lends itself well to use for common activities, and it can be spanned more economically than a square room of the same floor area. The smaller activity rooms and academic classrooms should be longer than they are wide with a ratio of about five to three respectively.

Each room should have sufficient height of ceiling to accommodate the activities which are to take place in it. Any additional height is unnecessary and costly, and any reduction in height cramps the activity program. Where basketball and similar games are to be played, the clearance from the floor to the ceiling should be 25 feet. Where there is a balcony, however, it may need to be 30 feet or higher. Locker, shower, and classrooms need not be more than 10 feet to 12 feet in height. Handball courts should be of regulation height. To admit sunlight and provide for diving, the ceiling above swimming pools should be 20 feet to 25 feet above the level of the floor around the pool.

Arrangement. It is in regard to arrangement that a great many mistakes in building planning are made, for a comparatively large share of planning has to do with the relationship of rooms to each other and the placement of the various service fixtures within the rooms. The placing of service fixtures will be considered under the discussion of each fixture. The following points should be kept in mind when considering the matter of correct room, hall, and stair arrangement within the building:

- (d) The supply and equipment room should be contiguous to the locker room.
- (e) The storeroom should be conveniently near the supply room.
- (f) The drying room should be near the equipment and shower rooms.
- (g) The apparatus room should be adjacent to the gym floor and provided with large doors.
- (h) The toilets and lavatories should be near the locker room.
- (i) The director's office should be in a location convenient for supervision of activities.
- (j) The waiting room should be close to the director's office.
- (k) The janitor's room should be close to his work center.
- (l) The locker room should be adjacent to the gymnasium if the two are on the same floor.

2. Limit halls to the very minimum. It costs money to enclose, heat, and clean hall space. The hall is not particularly a service unit if adequate pupil circulation within the building can be provided without it. Some halls are necessary and must be provided, but in general the space enclosed by the outer walls should be used for service units rather than for unnecessary halls. If possible, passage should be directly outdoors from the locker room. The line of traffic to the outdoors should not cross the line of traffic to the showers.

3. Have stairs lead directly from the locker room to the gymnasium and wide enough for a line of traffic to go down while another line is coming up, provided the gymnasium is on the floor above, as is customary. This avoids the necessity of passing through cold halls, helps keep students with street shoes off the gym floor, and saves space.

4. Provide outdoor exits and stairs, if necessary, from main gym floor. These serve particularly well when crowds use the gymnasium.

5. Avoid placing another room over the swimming pool, if possible. If this cannot be avoided, the floor of the room above should be damp-proofed.

Materials and Construction. The funds available, the materials at hand, the use to which the constructed part is to be put, the attitude of the community toward types of construction and materials, and the workmen available at the time will determine quite largely the quality and type of material and construction that will contribute to each finished unit in the building. If funds are ample and the community desires to use them, there can be relatively great freedom of choice in materials and construction. However, most communities must build economically, if at all, and consequently wish to select serviceable, reasonably priced materials and put them together in a comparatively inexpensive but substantial manner.

In economizing, it is best to use materials of a good standard grade; it is false economy to use cheap materials. The cost and availability of fireproofed material should be considered by those who plan to build. The various major parts of a building, including fixtures, will be considered in turn from the viewpoint of materials and construction. The placement or arrangement of fixtures will also be discussed. In the construction of all building parts the first important step is to secure reliable contractors or workmen, and the next is to provide for inspection of the work as it is being done.

Floors. There are two general types of floor to consider: (1) those for the shower, locker, and swimming pool rooms, and (2) those for the other activity rooms, standard classrooms, and offices. A hard, impervious floor is best for the first type since it is much less affected by moisture and can be more readily cleaned than wood, cork, or other less hard surfaces. Of the commonly used materials cement is the most economical and, consequently, the most generally used. Tile, however, makes an excellent surface but is too expensive to be used widely. More communities can afford to furnish it in shower rooms and around swimming pools than in locker and other auxiliary rooms. Although wood is warmer for bare feet, it is not to be recommended since it warps and deteriorates when exposed to damp air and water. Linoleum placed over rough cement serves quite well for floors of this type.

The floors should be sloped gradually to the drains, which should be large enough to prevent overflow to other rooms, especially from the shower room, which is most liable to overflow. The janitor's work should be made as easy and convenient as possible; hence, a floor that slopes to the drain and has no low, undrained sections for puddles is important. If it can be cared for with a hose and squeegee, a janitor should not be expected to use the more unpleasant and unsanitary mop. Occasionally the floor will need a thorough scrubbing with some strongly alkaline soap cleaner and a brush, but usually it just needs to have the dust and loose dirt washed off. The floor surface is very important. If it is too rough, it collects dirt and is very hard to clean; but if it is too smooth, the pupils have difficulty standing on it when it is wet. A compromise must then be made between the rough and the smooth which results in a medium finish, smooth enough to permit efficient cleaning but not so slippery that it is dangerous to use when wet. Pulverized steel mixed

with the surface finish helps produce a satisfactory surface. Nonskid floors for shower and locker rooms, consisting of Neoprene (rubber base) material, are available from the Gates Manufacturing Company of Wilmington, Del. Talc or other grit and a germicide may be added to the surface finish, which may be put on as a heavy paint. If apparatus fastenings are to be used in the floor, they should be placed there before the floor is finished, for the sake of economy and appearance. Raised cement locker bases should be installed at the time or shortly after the floor is laid.

Wood and cork are commonly used for the top flooring in offices, activity rooms, and standard classrooms. Wood is generally more serviceable and economical. Some commercial types of wood flooring serve quite well, but the most commonly used satisfactory woods are hard maple and pecan. Long, narrow strips of tongued and grooved material are recommended because they have less shrinkage and small cracks. Short lengths are not satisfactory, because there are too many cross cracks and too many chances for bits of the ends to chip off. The flooring should be seasoned and dry when it is put in. Pine and oak are more acceptable for the office and standard classroom floors than for the activity room floors. As stated above, in constructing these floors and preparing them for use, reliable workmen and regular inspection are essential. If the floor is to be placed on the ground, damp-proofing material should be used; then a ventilated air space should be left to prevent mildew and dry rot, and the floor proper should be placed above this. The floor proper, whether next to the ground or in a story above, should consist of sleepers, rough flooring, good building paper, and then the finished floor. Once the floors are in, they should be sanded and treated with an appropriate finish. There are several good commercial ones on the market. They are serviceable and stand up under cleaning and use remarkably well. Since the commercial companies are constantly improving their products and fitting them to specific needs, they can provide the type of finish desired and are glad to do so with instructions concerning proper methods of application. After it is sanded, but before the finish dressing is applied, lines in different colors and widths for three or four different games should be painted on the main gym floor; the special activity rooms should have just the lines for the game involved painted on the floor. Too many lines confuse the players who try to use the activity area.

Walls. There are many qualifications and service purposes, some general and others specific, that need to be met by satisfactory walls. Generally all walls should serve as at least partial barriers to the passage of sound, moisture, light, air, heat, and foreign materials. They should not be too expensive, but they should make a good appearance. No wall should constitute a particular hazard because of its rough or uneven surface, or because of the likelihood that it may fall down, burn, or afford a breeding place for harmful bacteria and fungus growths. Besides their general purposes, some walls need to serve specifically as rebounding surfaces for balls, others as places to attach apparatus, others as acoustical material, others as reflectors of light, and still others as particularly efficient barriers to the passage of moisture or sound.

Since practically all of the outside and main partition walls are made of brick, tile, or cement, any of which are satisfactory, we shall consider particularly the wall finish or inner part of the wall. Glazed brick, hollow glazed tile, and smooth cement are all good materials. The glazed bricks are more expensive but make a better appearance. Cement makes a poor appearance. All of these materials are firm enough to serve as a rebounding surface, smooth enough to furnish no hazard, noninflammable, generally impervious, reasonably economical, and easily cleaned. They are not good acoustical material, for echoes are easily set up between hard finished walls. Wood is a better acoustical material for large rooms, but it may constitute a fire hazard. It is too much affected by moisture to be used in the shower or locker rooms. Ordinary plaster is not generally satisfactory because it will not resist moisture or the impact of balls and players; however, it may be used in offices, standard classrooms, and above the 12-foot to 15-foot levels in the main gym rooms. Hard finishing plaster is used for handball courts and other surfaces where an exact bounce is necessary.

Granted the necessary materials, workmen, and inspection service which should insure substantial walls, there are several additional items that should be considered:

1. If the walls extend below the surface of the ground, all outside walls should be damp-proofed from the bottom to a foot above the surface of the ground.
2. A dead air space between the inner and outside walls will provide insulation against sound, cold, and heat.

3. The inner wall surface should be smooth, especially where activity groups are to come in contact with it, to reduce the number of abrasions.
4. A rough wall collects dirt.
5. Light colored walls reflect light better and provide a more cheerful atmosphere.
6. The shower room walls might well be white.
7. Fastenings for equipment and apparatus should be placed in the wall before the finish surface is put on.
8. Angle irons screwed to the floor where the floor meets the wall will round the corner and facilitate cleaning.
9. If the wall is to be used for a rebounding surface, it should be free from windows, radiators, and pipes to a height of 12 feet or more.
10. If the plumbing is not already in, openings of proper size should be left in all walls through which pipes are to pass.

In regions infested with termites special protection is required for the wood parts of walls and other units of construction. This can be done by preventing the exposure of underpinning and sills to dampness, by avoiding ground connections to wood parts, and by impregnating the wood with chemicals toxic to termites.

Roof and ceiling. Flaws in the roof are usually very expensive, for they are often difficult and costly to mend and the water that comes through them may damage or destroy valuable equipment or construction within the building. Consequently, it is imperative that an adequate roof be placed over the physical education building. In constructing smaller buildings, a satisfactory roof is not much of a problem, probably because of the greater slope of the roof and relatively little overlapping of roofing units. Shingles, tile, and several of the commercial types of roofing prove satisfactory. Wood shingles present more of a fire hazard than other materials, and tile is more expensive.

Securing an adequate roof for large physical education buildings is a greater problem. Large, flat surfaces, which allow water to remain longer and require several roofing units to be fitted together, thus increasing danger from storms during construction, should be avoided. Materials are important, of course, but any small error in putting them together is apt to cause a leak. For this reason it is of prime importance that the contract be let to an extremely reliable firm, one that can be depended upon to provide a roof without leaks that will last a reasonable length of time. The firm selected should

be granted the privilege of selecting materials according to the specifications set up. More freedom of choice should be given the contractor in the case of the roof because small defects are so important; exact workmanship in this case is relatively much more important than in most other phases of construction, where fair workmanship and good materials will often suffice.

Ceiling materials vary considerably according to the room. For offices, standard classrooms, and high gymnasium rooms plaster is satisfactory; for shower, locker, and auxiliary rooms cement, glazed brick, or tile are recommended. If apparatus is to be fastened to the ceiling, all necessary clamps and fasteners should be installed before the ceiling is finished. A light ceiling has the same general lighting advantages as light walls.

Doors. Wood, glass, reinforcing wire, copper, brass, and iron or steel are commonly combined to make satisfactory doors for any part of the physical education building. The specific purpose to be served will dictate the proper combination of the above materials. The funds available and the use and treatment the door can be expected to withstand should influence its selection. If light must enter through the door or vision is to be unobstructed, a section of glass is necessary; translucent glass is desirable if only light is to enter. If the door is to be subjected to alternate wetting and drying, as in the shower room, a covering of copper will reduce expansion and contraction. However, the copper may add more to the cost than funds will permit. If the door is to receive rough usage, rugged construction, brass kick plates, nonshatter glass, and protective bars over the glass are desirable features. If the door is to span a large space, strong but comparatively light construction is essential.

Other significant points to consider in selecting and installing satisfactory doors are these:

1. All exit doors should open outward and be equipped with panic bolts, so that crowds may not be trapped by a locker or blocked door.
2. Doors should be fastened to expansion bolts rather than wooden plugs driven into the wall since the wood is apt to work loose.
3. Door stops should be provided to keep doors from being "banged" to pieces.
4. Doors should open out from rather than into, main gym or activity rooms, even though a little vestibule is necessary at the head of a stairs.

5. Folding doors should be used to separate the gymnasium into halves, if it is planned to use it for two classes at a time.
6. Strong, efficient locks should be provided for doors that need to be kept closed.
7. Large doors should be provided to gym room for use by visitors or spectators and for use in moving apparatus and materials in and out.
8. Doors should be placed in the most convenient locations to facilitate circulation of traffic within the building.

Windows. In addition to serving as a barrier against the elements, windows have the double function of providing for ventilation and admitting natural light. Either of these functions may be replaced by artificial or mechanical means, but at a considerably greater cost. Hence the window space should be sufficiently large and properly arranged to care for these two functions under normal daytime conditions. The lighting function must be supplemented by artificial lights on dark days and at night, but in most cases the ventilating function can be cared for adequately by means of windows. Mechanical ventilation has its supporters, but studies of natural versus mechanical ventilation do not present any more conclusive evidence in favor of the mechanical type than in favor of the natural type. Expert opinion on this is also divided. In case of doubt it is probably a more advisable procedure to select the more economical, less complicated type of ventilation. In certain cases mechanical ventilation is necessary, particularly in locker rooms and in places where the window space is limited or nonexistent; but as a general practice just a few suction fans will suffice for these sections of a large building. When questions arise about the advisability of providing air conditioning, they should be answered only after checking with specialists.

The louvre type of window serves very well in ventilating, with a minimum of drafts and provides protection from rain, sleet, and snow. The single pivot section, fastened in the center and swinging out at the bottom and in at the top tends to break air currents and act as a shelter against the elements, while admitting air at top and bottom. A double pivot section, one above the other, would serve both purposes better and be easier to screen, because it would not project so far out, or in, from the plane of the window. However, it would cost more and provide more cracks to admit cold air in the winter or a driving rain in the summer. Some authorities recommend

central electrical control of windows for ventilation purposes. This is hardly advisable, for those using the room in question are in a much better position to know the ventilation requirements than is someone in the director's office. The window panes should not be too large, for many are broken and the replacement cost is decidedly less for small ones.

Translucent glass should be used for locker and shower room windows and in the gymnasium or basketball court windows on the west if there are any. It is sometimes advisable to have the same type in the windows on the west half of the south side, since the floor is practically always in use during late afternoon. If the floor is to be used in early morning, east windows may need to have translucent glass, too. Windows in activity rooms where balls are used should be screened, except when they are high enough to be relatively free from the danger of being hit. Sliding screens of number eight wire are recommended.

In efficiency of illumination, as in efficiency of ventilation, the placement of the windows is as important as the total window area, because distance from the source of light is an important factor. Light intensity is measured in terms of foot candles. A foot candle is the amount of light thrown by one international candle upon a perpendicular surface at a distance of one foot. This same unit of light at a distance of several feet is greatly reduced, for candle-power decreases inversely as the square of the distance. Thus 64-foot candles become 16-foot candles at two feet, one-foot candle at eight feet, one-fourth-foot candle at 16 feet, and only one sixty-fourth-foot candle at 64 feet—a little more than the distance across a fair-sized gym. It is evident that one half the light at one half the distance is twice as intense as twice the light at twice the distance. Consequently, one half the window area distributed on opposite sides of the floor will serve much better from the point of view of intensity of light where needed than will twice the window area on just one side. According to generally accepted standards of illumination, from 15-20 foot candles of light are sufficient for activity in which exact seeing is not important. This is the type presented in activity classes, except when small, fast-moving balls, such as tennis balls, are used. Direct sunlight measures about 10,000 foot candles; on average cloudy days this is reduced to from 1,000 to 2,000 foot

candles. Hence, it is very difficult to determine the exact amount of window space needed. In accord with the above facts the ratio of one fourth to one fifth of the total floor area in window area is satisfactory, provided the windows are on opposite sides of the gymnasium. However this may interfere with vision somewhat because of cross lighting. For smaller rooms the ratio of one fourth to one fifth is adequate.

Skylights are not to be recommended very highly because of the difficulties involved in making them function properly. They often condense moisture, which may drop on the floor, or they may cause drafts when open, fail to keep out rain, and permit the sun to shine directly on certain parts of the floor, all of which may interfere with activities.




Artificial lighting. When natural light is available it should be used; but when it is not, artificial lighting becomes necessary. The intensity of light in any part of the room can be regulated by regulating the intensity of the source and by placing light bulbs and reflectors correctly. Semidirect light causes less glare and eyestrain but is a little more expensive than direct light. Fluorescent lighting is advocated by some but attacked by others. Many new buildings now include fluorescent lighting, although its superiority over the filament type of lighting is by no means universally proven. Satisfactory intensity for general physical education activity is stated above as from 15-20 foot candles; for more exact vision greater intensity is desirable.

The director should consider the following points when having lighting fixtures installed.

1. Be sure they are installed before the walls and ceilings are finished.
2. Leave as few wires and encasing pipes exposed as possible.
3. Provide a switch in director's office that can be used to turn out all lights.
4. Place light switches in convenient places where lights can be seen from them.
5. In activity rooms recess lights or enclose in a protecting wire basket.
6. Fasten protecting baskets to wall or ceiling rather than to light fixtures.
7. Avoid the use of key switches as much as possible.
8. Place lights so that there is a minimum of glare from them.
9. Provide adequate and convenient light plugs to meet needs of special occasions.

Plumbing. In selecting plumbing equipment it is wise to purchase good standard materials from a reliable dealer. Durability, strength, simplicity of design, and a good finish are the marks of satisfactory equipment.

All pipes for water, heat, gas, or other purposes and all sewage and drain pipes should be laid before the walls and the foundation are built. Care should be taken to mend the damp-proofing in the event that pipes are laid after the walls are in. Toilets, showers, lavatories, cuspidors, and drinking fountains should be placed conveniently, of course, but in such position that a minimum of approach and disposal pipes are necessary. That is, if some of these service units must appear in each fourth of the building, it is more

economical to place them near each other thus  or even thus  than thus . This cannot be arranged in all cases, but

it can in many. Girls' showers, for instance, might as well be on the opposite side of the walls from boys' showers as in some other corner of the room or section of the building. Fewer pipes need be used, too, if the unit on the floor above is directly above the unit on the floor below. Hot and cold water pipes should be far enough apart so that the cold water remains cold, especially at the drinking fountains. The cleaning problem is simplified, the appearance is improved, and the danger of accident is reduced if pipes are enclosed in the walls. Those factors sufficiently outweigh the increased cost of installation and the greater difficulty of getting at pipes when something goes wrong, so that enclosing in the walls is recommended if provision is made for access when necessary.

Specific suggestions concerning each of the following service units are presented under the unit concerned.

1. *Radiators and heating.* The planner should:
 - (a) Provide sufficient radiation to furnish adequate heat on cold days—about 60° F. for the activity rooms, about 70° F. for the locker rooms, and about 80° F. for the shower and swimming pool rooms.
 - (b) Provide proportionately fewer heat units to heat large rooms than to heat small ones, for as rooms get larger the volume increases more rapidly than the area of exposed outer surface through which heat passes off. A one-inch cube has a height of one inch, a volume of one cubic inch, and a surface of six

square inches; a two-inch cube has a height of two, a volume of eight, and a surface of 24 inches; and a three-inch cube has a height of three, a volume of 27, and a surface of 54 inches. In the above the ratio between volume and surface decreases from one to six, to one to three, to one to two.

- (c) Recess radiators in walls or place them above the heights of pupils. If recessed, a few protecting bars or grates should be used. It is probably best to suspend them from the ceiling in locker rooms.
- (d) Insulate heat pipes to conserve heat, to prevent burns, and to prevent overheating of some rooms or halls.
- (e) Distribute radiators enough to provide a comparatively even temperature throughout the room.

2. *Showers.* The planners should:

- (a) Provide sufficient showers to care for peak load. Allow about 18 square feet for each shower, with one shower for five boys and one shower for four girls. If girls are to have individual showers and dressing booths, one shower can serve only two conveniently.
- (b) Provide large drain pipe from showers so that there will be no danger of overflow to other rooms.
- (c) Arrange showers so that water flowing from one does not interfere with the use of another shower.
- (d) Have shower heads higher than the heads of the people who are to use them, but set them to discharge diagonally downward so that those who use them may avoid getting their heads wet if they choose.
- (e) Provide shower heads with removable faces so that they can be cleaned easily.
- (f) Provide for individual control of showers. Although central control is advocated as an economy measure, individual control under supervision is not particularly expensive and is much more satisfactory to the bathers. Younger children may need to be taught how to take showers, and that can be done at school with a little effort.
- (g) Furnish soap and provide towel hooks in a convenient place for the bathers.

3. *Lavatories.* The planners should:

- (a) Provide lavatories near toilet room.
- (b) Provide white porcelain finish rather than colored finish.
- (c) Provide paper towels and liquid soap in connection with the lavatories.
- (d) Provide faucets that automatically close slowly if left open.

4. *Toilets.* The planners should:

- (a) Provide enough to care for peak load class; about one urinal

for 25 boys and one stool for 15 girls; about one stool for 30 boys.

- (b) Provide the type that flushes readily with a small amount of water.
 - (c) Provide foot release for flushing. It is much more sanitary than a hand release.
 - (d) Regulate urinal height to fit the convenience of the boys who are to use it.
5. *Cuspidors*. The planners should:
- (a) Provide a type that will flush easily with a little water.
 - (b) Provide foot-flush type.
 - (c) Place at least one in main gym room, recessed in wall with bars to keep balls out of it. This is essential since some players must expectorate during activity periods, and if no proper place is provided the floor or wall will have to suffice.
 - (d) Provide for removal or swinging back of bars for cleaning.
 - (e) Select a different colored finish from that of the drinking fountain.
6. *Drinking fountains*. The planners should:
- (a) Place one just outside main activity room and another in locker room. Drinking of water should be encouraged by providing a convenient supply; consequently, additional fountains may be necessary.
 - (b) Insulate cold water pipe leading to fountain if it is close to hot-water pipe.
 - (c) Provide for foot release.
 - (d) Select a type that is not apt to squirt water out on floor.
 - (e) Select a type that throws water toward one side rather than straight up.
7. *Lockers and Baskets*. The planners should:
- (a) Provide two or three small locker rooms rather than one large room. One room can be cooler for those who like to dress in a cooler room. One small room can then be used for the visiting team's locker room when visitors come to compete. This is an essential courtesy that should be extended to visitors; for they are guests of the institution and should be given the guest room, with the privacy it affords when they desire it.
 - (b) Build cement bases for the lockers.
 - (c) Provide aisles about five feet wide when lockers are placed in rows.
 - (d) Arrange lockers so that light from the windows falls between the rows.
 - (e) Arrange lockers around the walls in small rooms.
 - (f) Provide ventilation for metal lockers used to store equipment. They should be ventilated by sucking warm, dry air through them and out of doors.

Locker Unit. Lockers and baskets vary greatly in the matter of sizes, materials used in construction, and methods of handling. The wire type allows clothes to dry much better than the metal louvre type but are easier to break into and admit more dust and water. Larger, full-length lockers are more convenient and adequate than the small 12 x 12 x 36 inch type but also more expensive. The problem, then, is to provide that combination of lockers and baskets that most adequately meets the needs of the various groups concerned without entailing too great expense.

It is generally agreed that the varsity athletes should have individual lockers placed in the varsity locker room. Full-length lockers are recommended, but if funds will not permit them, half-length lockers can be made to do. Each locker should have a good strong lock on it. The master-key-combination type is recommended. The inside of the door should be painted white to improve visibility.

Some schools provide half-length lockers for all students who use the locker rooms, and a few provide full-length lockers for all. This is very convenient but too expensive to be recommended for general use. Some combination of basket and locker systems is much better. There are three reasonably good systems: two with attendants on duty during class time, and one without. In all three systems there are enough full-length lockers provided to care for the peak load. This includes class members, going and coming, recreational activity people, and intramural competitors. These lockers might be distributed in two or three smaller locker rooms or, in the event locked basket compartments are used, around the walls of the room which contains the baskets. In one of the systems requiring an attendant, two rows of baskets are situated back to back. Each basket is locked in its compartment with a master-key-combination lock. The student gets his basket and changes his clothing, putting his street clothes in an adjacent full-length locker provided for that purpose and locking it with the padlock which was on his basket compartment. An equipment exchange window is maintained at which the student can get clean clothes at the end of his exercise period. In the other system requiring an attendant, as in the one above, each person using the locker room has a basket with his assigned number on it. The baskets are placed on shelves in the basket room; those for each class in the same section of the basket room. When a student desires his basket, he calls out his number and the attendant slides the basket along

a chute to him. The wire basket, about 15 x 10 x 20 inches, contains his gym clothes, a clean towel, and the padlock for the locker in which he is to keep his street clothes. He selects his locker and uses it. When he has taken his shower and is ready to leave, he slides his basket into the chute. The attendant puts in a clean towel and places the basket back on the rack in the stall containing its number.

The third basket-locker system recommended here does not require an attendant on duty during the time baskets are used. The locker arrangement is the same as above, but the basket arrangement differs. The same type of baskets, with numbers on them and corresponding numbers on their individual compartments, is recommended; but these baskets are placed around the outside of a series of hollow oblong cages. The cages project outward somewhat like the spokes from a hub but more like the fingers of four hands crossed at the wrists. In the central, or wrist, area is the equipment room. Above the total basket setup is heavy wire fencing to provide ventilation and safety for equipment. Each cage is about 20 to 30 feet in length, 8 feet in width, and 6 feet in height, exclusive of the wire fencing above it. Heavy wire compartments around the outer part of the cage are arranged in five tiers to contain students' baskets. The passageway down the center of the hollow cage is wide enough to permit servicing the individual baskets from two large baskets on rollers, one for used clothes and one for clean clothes. The student's basket is constructed low enough in the back, toward the inside of the cage, to permit the attendant to exchange towels and clothing issued by the department and to check equipment. A tray is provided in the upper part of the back of the student's basket to contain the clothing which is to be exchanged. Two bars extend across the basket on which to put damp clothing so that it will dry better. A metal door on the front of the compartment, toward the outside, is provided with a good master-key-combination padlock. This lock can also be used on the locker when the student leaves his street clothes there. The student may take his basket from its compartment when he needs it and return it when he is through with it. This system is economical, convenient, and sanitary.

The following locker room accessories are desirable.

1. Benches for all lockers. Long benches fastened to the floor by steel posts serve very well.
2. Mirrors for both girls and boys. One in each small locker room,

- and at least one at each end of the large locker room, if there is a large locker room.
3. Dressing booths for girls. It is satisfactory to provide booths for only a part of the class, since some will not care for them. More and more girls are accepting the type of dressing facilities and showers used by boys.
 4. A bulletin board near the entrance to locker room or rooms.
 5. Hair dryers for the girls' locker room.

Apparatus. Apparatus should be selected on the basis of its prospective usefulness in furthering a modern physical education program rather than because of traditional support of the activity for which it will be used. Traditional support does not condemn it, but in itself is not sufficient to determine the selection of apparatus. Rugged, simple, standard pieces should be chosen. Even though the original cost may be greater, the difference will be compensated for in reduced repair bills. Since shipping costs for heavy pieces are relatively high, it may be more economical to purchase from some dealer close at hand.

Mobile pieces that can be fastened to floor or wall catches or thrown off rollers by means of a lever are recommended. When the apparatus has been used, it can then be swung back against the wall, raised to the ceiling, or rolled off to the apparatus room, leaving the main floor available for other activities. Mats and smaller pieces that require no fastening should be stored out of the way on a platform on wheels and in boxes on wheels.

Swimming Unit. The significance of swimming as an activity for elementary and high school students during the regular school year has probably been overemphasized by physical education people. Swimming, however, if it can be financed, is an excellent activity when conducted in the most favorable surroundings. Many of the essential elements of optimum surroundings are present in the outdoor pool during the warm months of the year. From the viewpoint of an adequate, economical physical education setup in high schools in the northern states, it is sound procedure to dispense with inside pools and swimming during the months when colds are most prevalent and costs of heating water and providing swimming facilities are highest, except in some of the larger cities. The money for the school swimming program can be more economically spent by providing swimming facilities under adequate instruction and supervision in

the warm months when students care most about swimming. This will do away with the ever present group of youngsters who have excuses, legitimate and otherwise, for staying out of the water, and it will provide a valuable supervised recreational period during the summer. However, many physical educators and the communities which they represent are not yet ready to break with tradition and provide activities, in the absence of precedent, at the time they serve their purpose best. Since this is true, funds that could provide more adequate facilities for other activities during the school year will continue to be used to provide inside swimming units in the larger communities.

Colleges and universities have additional needs for inside pools for teacher-training purposes and varsity competition. Then, too, college students are apt to be away from school during the summer, when students in the precollege ages can be expected to get their training in swimming in the local pool. Consequently, the following suggestions are presented concerning swimming pools.

1. The pool should not be placed in a dark hole in the basement. Instead, ample light and clearance should be provided above the pool. It is well to place the pool on the south side of building to get more sunlight.
2. It is a good plan to secure the services of a contractor who has built several successful pools.
3. Surface finishing materials for floor and walls of pool should be light-colored glazed brick or tile.
4. A pool 75 feet long by 35 feet wide is adequate for most school purposes, although one 42 feet wide is more desirable. Two smaller pools, one deep and the other shallow, are better for school purposes than is one large pool.
5. For one pool, the depth should range from 3 feet at shallow end to 11 feet at deepest point, and the slopes should be gradual until the approach to the deep end, where the slope should be increased. For colleges the depth at shallow end might well be 4 feet.
6. Lanes, 7 feet apart, should be marked or built in, using dark-colored tile, if pool is to be used for competitive purposes.
7. Deep scum gutters should be provided to drain away sputum, materials washed in from the water surface, and materials washed in from around the pool, and to serve as hand holds for swimmers.
8. A space of 6 to 8 feet, with nonslip surface and free from obstacles, should be provided all around the pool.
9. A separate door should be provided for spectators to use, and all

spectators in street clothes should be excluded from the area surrounding pool.

10. If possible a chlorinating, or brominating, and filtering system should be provided to destroy harmful bacteria, and a vacuum cleaner to remove dirt. Additional sanitation suggestions include:

- (a) Treatment of water so that it does not have to be changed frequently.
 - (b) The use of chlorine or bromine; both economical, satisfactory chemicals, to keep down harmful bacteria count. Bromine probably irritates less.
 - (c) The use of one ppm. of copper sulphate to destroy algae effectively.
 - (d) The use of alum to help coagulate bacteria.
 - (e) A heat unit which introduces steam into the recirculating system.
 - (f) A test to determine chlorine content. The orthotolidine test is a simple one. Liquid in glass tubes, graded according to amount of red coloring matter, is used. Another liquid is provided, with instructions as to amount to add to samples of water of specified volume from the pool. The samples of water are then compared with the standard colored tubes. Chlorine content is indicated by amount of red coloring in water. Each tube is labeled with the ppm. of chlorine that a sample of treated water of the same color contains. A content of 0.2 ppm. to 0.5 ppm. is considered satisfactory. Bacteria content is controlled by chlorine content. Most water laboratories can furnish more detailed information on this point.
 - (g) A bacteria count. This will not give the number of harmful bacteria, but the total number of all the bacteria present reflects the probable number of harmful bacteria.
 - (h) A "differential bacteria count" of samples of pool water, in which the number of bacteria of each type are counted.
11. In operating the pool the following practices should be observed:
- (a) Use a suction cleaner to clean dirt off bottom and sides of the pool.
 - (b) Test daily for temperature (aim at 77°-85° F.) and chlorine content of water.
 - (c) Require all who use the pool to have a medical examination, to be free from sores, and to bathe with soap before entering pool.
 - (d) Require simple cotton or woolen suits for girls but let boys swim without suits, except for mixed groups.
 - (e) Discourage the practice of dangerous stunts in and around the pool.
 - (f) Provide a competent lifeguard at all times when the pool is in use.

12. When the pool does not have a chlorinating or recirculating system, it is advisable to use hypochlorite drawn through the pool in a bag or porous bucket to destroy harmful bacteria. The water should be changed often enough to keep the pool clean. Swimmers should be kept out of the pool for several hours after it is treated by the above method, for certain parts of it will contain concentrated chlorine.

Outdoor Activity Areas. The following general points should be kept in mind in planning outdoor physical education activity areas:

1. If possible a conveniently located area should be selected.
2. Those parts that must be protected or fenced should be located along the sides or ends of the general area.
3. Fields, such as football fields, to which the public must have convenient access, should be placed to one side, or better still, in a convenient corner of the general play area.
4. Correct planning leaves no small plats of unusable size in the corners or along the sides of the area. It is a good plan to leave all unscheduled or unmarked space together, rather than in small plats here and there, where they cannot be used as a general play area.
5. Most play areas should be fenced. A suitable fence for many locations consists of 11-gauge woven wire 10 feet high. This will protect property, provide privacy, reduce supervising problems, and keep balls and other play materials from rolling, flying, or being carried into the street.
6. Sections of the general area should be set aside for the less rugged competitors (girls, younger children, handicapped students, and the like).
7. Provision should be made for adequate surface and subsurface drainage.
8. Surfacing materials should be selected to fit the budget, the needs for the activities, and the welfare of the students.
9. Activity area should be fitted to the contour of the land and around or between stationary obstructions. Trees, light poles, large rocks, and the like should be considered in laying out the various areas.
10. Specialists should be consulted concerning the various problems that arise in connection with lighting, landscaping, fencing, drainage, and the construction of specific areas.
11. The lighting should be planned to avoid glare and dark spots, place wires underground, and provide a good general appearance.
12. Walks should not interfere with play areas but should be laid, insofar as possible, to fit the natural lines of traffic. This means rounded corners and following traffic short cuts.
13. A few drinking fountains should be placed in protected spots near activity areas. These should be provided with a foot release.
14. Provision should be made for storing equipment and supplies near the areas where they will be used.

15. Provisions should be made for multiple use of fields during different parts of the day, or night, and during different seasons.

16. Specific play areas should be so placed that participants will be handicapped as little as possible by the sun, the wind, and contours of the ground.

17. Some area other than the streets should be provided for parking space in the vicinity. An acre of ground will accommodate about 150 cars.

Baseball fields. A considerable problem arises in orienting baseball diamonds so that both the players and the spectators will be handicapped as little as possible. For professional games the spectators often receive more consideration than they do for school contests. The school diamonds should be laid out to favor the players, for they are of prime importance and often they play without spectators. For schools it is satisfactory to have the base line from home to first base run directly west. This will reduce considerably interference with vision by the afternoon sun. Adequate backstops should be provided to reduce lost balls and ball chasing in general and to protect spectators. The distance from home plate and the size of the backstop will depend upon space and materials available.

The construction and care of the diamond is important. The area should be approximately level, with adequate provision for drainage. The pitcher's plate may be elevated on a gradually sloping mound not higher than 18 inches above the surface of the infield. The ground should be rolled in the spring, and the grass should be kept mowed in both the infield and outfield. If the sod is removed from the base paths and other sections of the infield, those areas need care before each game. If water is available, they are customarily wet down, raked, and rolled, after which, first and third base lines are extended, and the boxes at home plate are marked with lime. Permanent markers on the foul lines in deep right and left field are valuable aids in judging fair and foul balls.

Football fields. The football field should be laid out and constructed in such a manner that it will be the most adequate playing area possible. In order that the team defending the least favored goal may be handicapped as little as possible by the sun and the wind the layout must be considered carefully. Since the prevailing winds in most sections of the country blow from the west, and since the sun shines from the west in the late fall afternoon it is often best

to lay out the field north and south if possible. Other factors may make this undesirable but, in general, it is well to keep this in mind.

The field and adjacent territory should be well drained. This is especially important if it is located on low ground. Coarse gravel a couple feet under the surface soil, which is composed of 8-12 inches to one foot of loam, with well-placed tile will aid materially in quick drainage. Most fields are already constructed without a gravel base and cannot be rebuilt. Tile alone may help considerably in such cases.

The field should be about 8 inches higher in the center than at the sideline and should slope gradually and evenly to the sides of the playing area to allow water to drain off quickly rather than stand in pools any place on the field.

The surface soil should be of the type that will maintain a good growth of grass. Fertilizer and lime may need to be added at times. Water pipes so laid that there are adequate outlets for hose connections will simplify greatly the problem of watering in those regions where summer drought causes a problem. The outlets must be far enough under the surface and well enough enclosed that there will be no danger of injury to players from them.

Tennis courts. Perhaps the most satisfactory layout position for tennis courts would be from northwest to southeast. However, courts as a rule are not placed at an angle, so the north and south position is most common.

There are many regions in the United States, especially in the northern part, where hard surface courts are almost essential if tennis is to be played in the spring of the year. This is true to a limited extent in the other sections of the country.

Grass courts for schools will not stand up under the regular play which they will get during the tennis season. Clay or dirt courts are not only unfit for play after a rain but remain unfit until they are rolled and marked. In many schools it is difficult to free some one of the building and grounds staff just when the courts need to be serviced. That means additional unused time. Chat (rock broken into fine pieces), tufa (disintegrated rock), and cinders are used at times for surfacing. They are usable much sooner after a rain than are dirt courts, but the playing surface is not particularly satisfactory. It is inclined to be too soft for a good bounce and too loose to permit quick starting and stopping by the players.

Cement is one of the most satisfactory surfacing materials. The cost is high, but if properly laid, a cement court will last a long time. Proper laying includes good drainage around the edge and under the court, coarse gravel and rock base to a depth of 12-18 inches, then coarse cement, and finally a finish surface of fine cement. The surface must not be too smooth, or players will experience difficulty in keeping their footing. Asphalt is much more economical than cement but needs repair and replacement in a comparatively short time.

There are a number of specific tennis court surface preparations that are also good. Manufacturers will gladly provide information and assistance in building courts using their prepared surfacing materials. Backstops, about 21 feet from the base line and 12 feet high are recommended. A group of courts might well be enclosed by a 12-foot fence.

Putting green. Grass greens are to be preferred to other greens but require expert care and considerable cost for upkeep. If a green is to have heavy use, as it might well have as an approaching and putting green at school, some surface that will stand more abuse at a lower cost is better. Coarse sand with enough oil to keep it from drying out and blowing away may serve very well. A smoothing device to prepare two strips at right angles from one side of the green to the other, crossing at the hole, will enable students to smooth off a putting strip as they wish to use it. Cottonseed greens require comparatively little upkeep and provide a fair putting surface.

Track. A convenient arrangement for most schools that have both track and football is that of placing the track around the football fields. This is economical of space and places the performers in both sports in positions where they can be observed from the same bleachers.

The construction of a good track is a technical job, involving proper curves at the ends, adequate safe curbs, sufficient drainage, a good deep base of coarse rock, over which is placed the proper combination of coarse cinders, then fine cinders and clay or loam. Anyone wishing to build one should refer to detailed instructions which are available in many good recent books on track and field and in books on construction of outdoor facilities.

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Interschool Athletics

BACKGROUND OF INTERSCHOOL ATHLETICS

Colleges and Universities. As far back as anthropologists can go in man's history they find evidences of his participation in sports and games. But despite the fact that man has always wanted to play, and has played when possible, only recently has he ventured to play in the schools. The traditional philosophy of education, with its emphasis on scholarship and intellectual development, could conceive of no place for play in an educational institution. Naturally, this powerful urge could not be entirely throttled, and despite the unsympathetic and frequently hostile attitude of the faculty, the students indulged in various sports and games in their leisure moments. It was not until the nineteenth century that students dared form teams for interschool contests. Organized athletics appeared in England as early as 1822 when the first Eton-Harrow cricket match was played. Oxford and Cambridge met for the first time in 1827. In the United States, the first interschool contest was a rowing race between Yale and Harvard in 1852. In 1859 the first baseball game was played between Williams and Amherst.

Despite these sporadic contests prior to the Civil War, the real development came afterward. Up to this time the impromptu type of play on campus predominated. But the war, as all wars since have done, greatly stimulated interest in sports. This fact, plus the greatly expanded enrollments, gave such impetus to athletics that the informal, intramural type of program developed a new facet—namely, interinstitutional competition. The better teams within institutions began to challenge similar teams in nearby schools. This form of extramural competition proved immediately popular.

Participants and student bodies were extremely enthusiastic and supported this new development wholeheartedly. Faculty members were undoubtedly aware of these student activities but took no action to control or curtail them.

At first, the captain was the coach of the team. As interest in intercollegiate athletics increased, it became obvious that more experienced leadership was necessary. The practice developed to employ on a seasonal basis an alumnus who had been an outstanding performer. Alumni coaches eventually gave way to professional coaches. In the days before gate receipts coaches were paid by the students, alumni, or friends of the institution. Since colleges and universities had no facilities for athletics, it was necessary for students to obtain, prepare, and maintain the playing areas. Originally, all the playing equipment and uniforms were furnished by the players, but as the importance of the contests grew, parents, alumni, or friends contributed to their purchase.

For a number of years after the Civil War this student-initiated and conducted program flourished. But as it grew many problems developed. In the first place, the amount of work which was necessary to conduct a program of athletics became too much for students who were expected to carry a normal academic load. Secondly, the constantly changing student population prevented any stability in leadership and continuity in policy. Thirdly, as a result of both these factors many undesirable practices occurred. Business matters were not efficiently handled, and financial irregularities resulted. A fierce struggle was waged within the institution when the different sports competed with each other for players, financial support, and facilities. Many questionable practices were engaged in to recruit athletes. Eligibility rules were nonexistent; travel was unrestrained. Students with injuries did not receive proper medical care. Student leadership proved incapable of meeting the many problems which developed.

The athletic situation deteriorated to such an extent that the faculty was finally forced to take steps to eliminate the problem. Two major changes in the conduct of the program resulted:

1. At the insistence of college administrators, the students were forced to establish an organization which would give more stability to the management. These organizations were called student athletic associations, which were directed by an alumnus called a graduate manager.
2. Institutional control was exercised through an athletic committee,

which was constituted in some cases entirely of faculty members and in others by a combination of faculty, alumni, and students. The graduate managers were to administer the athletic program under the policies established by the athletic committees.

Although these two measures brought intercollegiate athletics much more under institutional control, they did not involve the acceptance of athletics as a legitimate educational activity. The entire financial support of the athletic program was the responsibility of the student athletic association. The college administrators and faculty were determined to eliminate the evils which had developed, but they had no intention of recognizing athletics as a function of higher education.

For a time this new arrangement seemed to solve the problems which had proven so objectionable to the faculties and administrations. Certainly, the graduate manager arrangement was an improvement over the student-directed program. The pressures on students were relieved, and the graduate manager brought efficiency and businesslike methods into operation. However, graduate managers were not educators. They were closer to the alumni and coaches than to the faculty. As intercollegiate athletics became a lucrative enterprise, managers became more concerned about financial rather than educational outcomes.

Inevitably a conflict arose between the faculty members on athletic committees and graduate managers on matters of policy. In many athletic committees the alumni, students, or both gained control over the faculty members, and, in effect, the institution no longer had any jurisdiction over the program. As evil practices mounted and problems multiplied a meeting of college presidents was held in 1905 which led to the formation of the Intercollegiate Athletic Association of the United States. This later became the National Collegiate Athletic Association, whose purpose was to eliminate the evils and raise the standards of intercollegiate athletic competition.

When it became clear that the leadership of graduate managers left much to be desired, college administrators came to the conclusion that the only way to conduct intercollegiate athletics along educational lines was to appoint a faculty member to administer them. The most logical person in the majority of institutions was the director of physical education or some member of his staff. These

individuals were already concerned with the physical phase of the students' life. Many had participated in intercollegiate athletics and had coaching experience. When increasing numbers of these individuals received professional preparation in physical education, they were well qualified to direct the athletic program.

As time went on, more and more colleges and universities gradually eliminated the student athletic associations and delegated this responsibility to physical education departments. Along with this change in organizational setup colleges and universities accepted the financial responsibility of the program. The great majority of institutions provided and maintained the facilities and employed the personnel from the institutional budgets. Generally, the intercollegiate program was expected to be self-supporting insofar as the current operating expenses were concerned.

With these developments athletics, at long last, were accepted as an integral part of the educational programs. Even though they were partially self-supporting and still included some type of athletic committee setup, they were organizationally and philosophically a legitimate phase of the educational life of the institution. To be sure there were exceptions, primarily among the larger institutions, where the graduate-manager and student-athletic-association type of organization persisted. But in the smaller colleges and universities and some of the larger ones the athletic program had evolved through the stages of the impromptu intrainstitutional competition, the student-sponsored and conducted programs, and the graduate-manager and athletic-association setup to the place where it was regarded as within, rather than without, the institutional curriculum.

Interscholastic Athletics. The development of interscholastic athletics followed and paralleled that of intercollegiate athletics in many respects. It is quite likely that many features of high school athletics were copied from the intercollegiate patterns. The interscholastic movement began ten or fifteen years after the Civil War, when athletics in institutions of higher learning were already well underway. Like intercollegiate athletics, high school athletics were initiated by students without the support and sympathy of school administrators and faculty members. The students received more encouragement and assistance from the community than from the school. The early physical educators were unco-operative and, in many cases, hostile to the program because it was contrary to their

philosophy and practice. Just as in colleges and universities many problems and uneducational practices developed under student sponsorship and leadership. When conditions became intolerable, school administrators were forced to assume control. This led eventually to the acceptance of interscholastic athletics as an essential part of the school curriculum.

The Relationship of Athletics to Physical Education. While athletics were springing up without the encouragement or guidance of school authorities, physical education classwork was being increasingly emphasized in the schools. The growing number of students with nervous breakdowns and otherwise impaired health finally forced school administrators to recognize that steps must be taken to safeguard the health of students. Confronted with this problem, educators turned to Europe again and borrowed the most popular systems of physical education then in vogue, which, together with hygiene, were added to the curriculum to assist in the digestion of the already heavy intellectual diet. In colleges physicians, because of their medical background, were placed in charge of the hygiene and physical education classes. Physical education usually consisted of American modifications of German or Swedish formal gymnastics. This form of physical education was unpopular with both high school and college students, who endured it only because it was required. At the same time, the students in their leisure moments were vigorously and enthusiastically promoting various sports and contests among themselves and with students of other schools.

When school administrators decided to accept interschool athletics and introduce it into the school curriculum, they logically located it in the physical education department. It proved to be an unwelcome guest. Physical educators viewed this foundling with suspicion and reluctantly accepted it as a necessary evil. A bitter struggle was waged for the leadership of the combined department. Little harmony and co-operation existed between athletics and physical education, and considerable jealousy and antagonism developed. This was to be expected, because, at that time, the two areas were so far apart in philosophy, activities, and methodology that they could never be harmoniously reconciled.

A new philosophy of education, emerging about the beginning of the twentieth century, had profound implications for physical education. This new philosophy exploded the ancient theory of

the dualism of the mind and the body and accepted the concept of the unity of the human organism. It also conceived of the function of the school as that of directing children and youth in learning the activities which constitute socially efficient conduct. No longer was the purpose of the school the development of the mental capacities only. No longer was the classroom the "brain factory" and the gymnasium the "muscle factory." The structural, analytical concept of education, which dismembered the child into his mental, physical, social, and moral attributes and then attempted to develop each independently, was rejected. The school existed for the purpose of preparing each child for the finest kind of living possible for him to achieve, given his capacities.

Out of this new philosophy of education a new philosophy of physical education evolved gradually. It conceived of physical education as education by means of the physical rather than education of the physical. In other words, fine living became the aim of physical education just as it became the aim of every phase of school life. The emphasis shifted from the purely physical to the mental and social as well. This new conception revolutionized traditional practices in physical education. In 1910, because of the influence of Wood and Hetherington, a new era of physical education began. They advocated the elimination of the formal systems of gymnastics and the substitution of natural play activities. This new movement gathered impetus, and today it is accepted as the American system of physical education. It has largely replaced the German and Swedish systems and their variations, which were not acceptable to American youth.

The broadened educational philosophy also gave athletics a new significance in the educational setup. Here were great potentialities for developing in youth desirable knowledge, skills, habits, and attitudes. It was found that athletics, under proper guidance and leadership, could become a powerful educational force, particularly in the development of social and moral, as well as physical, qualities. The dramatic nature of interschool athletics made them even more valuable in some respects than the physical education activities of the curriculum. But the regrettable fact remained that the administration of interinstitutional athletics left much to be desired. Although the conduct of athletics has been improved immeasurably since their

inclusion within the school program, certain practices still exist which can hardly be called educational in nature.

This new conception of education and physical education, plus the changes which have occurred in interschool athletics, has profoundly altered relations between the two areas. Most of the causes of conflict have disappeared, so that, today, the athletic program is considered an essential phase of the total physical education program. With similar aims, objectives, activities, personnel, and facilities there is much more reason to combine the interschool, intramural, and service programs into one integrated unit, rather than separate departments. When these three programs are co-ordinated they aid and abet each other. In addition, a unified department is much less expensive than separate departments which duplicate personnel, equipment, and facilities. For the great majority of colleges and universities and all secondary schools the most effective educational outcomes are obtained when all the big-muscle play activities—curricular as well as extracurricular—are co-ordinated in one department under the leadership of a well-qualified individual.

Objectives of Athletics. The objectives of interschool athletics should be identical with those of physical education (see Chapter 2). The opinion is well established in educational circles that the only justification for interscholastic and intercollegiate athletics is their contribution to educational and physical educational objectives. The great majority of school administrators and faculty members still evaluate athletics upon this basis, although the programs in some schools are conducted for purposes which could never be construed as educational.

Coaches of interschool teams have the opportunity to achieve physical education objectives to a greater extent than the leaders of service and intramural activities. They have significant advantages in the greater time and better facilities which are available. In addition, they are concerned with a smaller number of students, all of whom are highly motivated. Under the circumstances, participants in interschool competition attain a greater measure of physical fitness and motor skills than is possible in the service and intramural programs. Insofar as the mental, emotional, and social objectives are concerned, the potentialities for developing them are greater in the interschool program, but the extent to which these opportunities are realized depends upon the leadership.

Standards in Athletics for Boys in Secondary Schools. Interscholastic athletics have been conducted in America for a period of approximately seventy-five years. In this long period of time many valuable lessons have been learned. Gradually, desirable standards for the conduct of athletics have evolved. Such standards have done much to improve interscholastic athletics. They represent ideal practices and policies which, if extensively adhered to, would raise the quality of athletic programs. (See Appendix B for the "Standards and Athletics in Secondary Schools" which were developed by a joint committee of the Association of Secondary School Principals, the National Federation of State High School Athletic Associations, and the American Association for Health, Physical Education, and Recreation.)

CONTROL OF ATHLETICS

Control of Intercollegiate Athletics. Once school administrators arrived at the stage where they endeavored to control and supervise athletics, they soon found that however well one school might conduct its own program, other schools did not necessarily do likewise. The need of some organized body to direct and control intercollegiate athletic competition was soon felt, and this gave birth to our present athletic associations and conferences.

Another factor was also involved in the development of athletic conferences. In the early days of intercollegiate athletics, administrators who wanted to raise standards found it very difficult to do alone because of the pressures of alumni, students, supporters, and townspeople who did not always have the best interests of the institution and participants in mind. They found, however, that this objective was much easier to accomplish with a group of like-minded administrators. Pressure groups had difficulty in opposing the new standards because each institution in a league or conference had to comply or lose its natural rivals.

Control on a National Level. The National Collegiate Athletic Association is a national organization which has as its primary purpose "the regulation and supervision of college athletics throughout the United States in order that the athletic activities of the colleges and universities may be maintained on an ethical plane in keeping with the dignity and high purpose of education." Membership in

the National Collegiate Athletic Association, originally organized in 1905 as the Inter-Collegiate Athletic Association, is open to all colleges and universities in the United States. It is divided into eight geographic districts, each under its own vice-president, who acts upon charges involving eligibility and who advises upon the conduct of intercollegiate athletics in his own district. He reports to the annual convention of the association on the strictness with which the rules have been enforced during the year, changes in eligibility requirements by institutions, local conferences, leagues, district competitions, if any, and any other facts or recommendations which might be of interest to the association.

Membership in the National Collegiate Athletic Association is voluntary. Dues are based upon the size of the institution. Each member institution is entitled to one faculty representative. Thus, the association represents faculty control on a national level. Until 1947 it had never attempted to force compliance to its regulations and standards. Prior to this time it had attempted to control intercollegiate athletics by persuasion and appeal to reason. In its annual meeting in January, 1948, legislation was adopted to curb the rapidly developing abuses and evils. This legislation, which became known as the "Sanity Code," made the National Collegiate Athletic Association an accrediting association which forced compliance to its regulations under pain of expulsion from the organization.

The controversy over this new role of the National Collegiate Athletic Association was so great that the member schools of several conferences threatened to withdraw from the association. Consequently, the "Sanity Code" was rescinded at the annual convention held in January, 1951.

The National Collegiate Athletic Association performs the following services:¹

3. Conducts National Collegiate Championship meets and tournaments in the following thirteen sports and enforces eligibility rules for this competition:

Baseball	Golf	Skiing
Basketball	Gymnastics	Tennis
Boxing	Ice Hockey	Track and Field
Cross Country	Swimming	Wrestling
Fencing		

4. Maintains a service branch, the National Collegiate Athletic Bureau, which collects, compiles, and distributes to the press and college officials the official statistics of college football, basketball, and track, and generally performs other functions commonly associated with a publishing and record-keeping agency.

5. Provides a large film library, covering play in national meets and tournaments.

6. Provides financial and other assistance to various groups interested in the promotion and encouragement of intercollegiate and intramural activities; actively assists the various national coaches associations in projects which provide better teaching, better competition, and sounder administration.

7. Participates in the U. S. Olympic and Pan American movements as the administrative agency for the colleges in such matters as fund-raising, sports organization, and the providing of coaches and athletes for United States teams.

8. Administers a group-insurance program whereby member colleges can provide catastrophe medical coverage for athletes injured in play practice or transport. More than 40,000 students are enrolled annually in this program.

9. Maintains a central clearing and counseling agency in the field of college athletic administration.

10. Conducts studies as a means of developing solutions to athletic problems, such as the recent surveys on television, post-season events, length and time of playing and practice seasons, admission taxes, college baseball, etc.

11. Enacts legislation to deal with athletic problems when they spread across regional lines and member institutions concur that national action is needed.

12. In effect, the National Collegiate Athletic Association is an organization through which the universities and colleges of the nation speak of and act on athletic matters at the national level.

Regional Control of Intercollegiate Athletics. Athletic conferences have assumed much responsibility for controlling the athletic programs of member institutions. Most colleges and universities belong to some type of conference. Institutions of similar types, curricula,

philosophy, entrance requirements, size, and financial resources tend to join together in athletic conferences. Sometimes these institutions are all within one state, but frequently they are located on a regional basis.

These conferences exist for the purpose of regulating athletic competition between like-minded institutions. The member institutions want to compete with schools which have similar standards. The National Collegiate Athletic Association necessarily must be general in its rules and regulations and allow the conferences to equalize competitive opportunities on a state or regional basis.

A conference facilitates scheduling, builds a more friendly spirit between schools, promotes proper publicity, stimulates more ethical practices, standardizes eligibility, and provides a convenient means of discussing and solving problems. Conferences definitely stimulate interest on the part of alumni, students, and supporters. The competition for the conference championship against traditional rivals is invariably conducive to good attendance.

The athletic conferences are controlled by faculty representatives of member institutions. The athletic directors, coaches of various sports, and publicity directors have separate organizations of their own which ordinarily meet at the same time as the faculty representatives. These different groups may make recommendations to the faculty representatives, but in the last analysis, the latter group establishes the policies, rules, and regulations of intercollegiate competition of member institutions.

A number of the larger athletic conferences employ a full-time commissioner who discharges stipulated duties. Usually, these duties involve the enforcement of the conference regulations, particularly those relating to eligibility, subsidization, and recruiting. Institutions which are found to violate conference regulations may be fined, obliged to forfeit contests, placed on probation, or expelled from the conference.

Local Control of Intercollegiate Athletics. The third and final phase of controlling intercollegiate athletics resides within each institution itself. This form of control complements those of the National Collegiate Athletic Association and the athletic conferences. Although each level of control is important and has its unique functions, the most important form of control is undoubtedly that on the local level. No outside agency can adequately control an institution

which endeavors to employ devious practices to win games. The ideal in intercollegiate athletics is to have each individual college and university conduct its athletic affairs on such a high level that no outside regulation becomes necessary. There are many institutions which have such intercollegiate athletic programs.

The history of intercollegiate athletics is a story of a long struggle for control between the faculty and students and alumni. Intercollegiate athletics were first organized and controlled by students and alumni, but both groups proved unequal to the task of conducting the program on a satisfactory basis. So many abuses and vicious practices developed that the faculty finally had no alternative but to take over control. Experience throughout the years has repeatedly shown that students and alumni are incapable of administering intercollegiate athletics toward educational goals. Institutional control has gradually developed and today is accepted as the desirable standard.

When institutions decided to take over the control of intercollegiate athletics, various types of committees were created to administer the program. In those early days when professional physical education was not well advanced and professionally trained administrators were not available, this appeared to be the only solution. Some committees were composed entirely of faculty. Many institutions continued to give students and alumni a part in the control of the athletic program by including them on the executive committees. In such committees the faculty members usually outnumbered the combined student and alumni members to assure faculty control. In other institutions the students and alumni were loath to surrender any of their power to the faculty. As a result, the faculty was in the minority on many of the regulatory committees which came into existence.

The faculty-dominated committees were largely responsible for the improved standards that gradually developed in intercollegiate athletics. The committees exercised complete administrative authority over the entire athletic program. The athletic director administered the decisions and policies of the committee. The faculty members usually were unacquainted with athletic problems, but they did recognize educational principles and ideals and they strove steadfastly to attain them.

Over the years, the methods of administering athletics have

gradually changed. Today, two major issues are involved in the institutional control of intercollegiate athletics. The first of these is concerned with the matter of whether intercollegiate athletics will be administered as an integral part of the over-all physical education program or as a separate athletic department. The second issue involves the question of whether or not an athletic committee should be employed and, if so, what its relationship to the athletic program should be.

Athletics as part of the physical education program. In many colleges and universities, particularly the smaller ones, the program of intercollegiate athletics is a part of the over-all physical education program. The director of physical education has the ultimate responsibility for the entire athletic program. He may direct the athletic affairs himself, or this responsibility might be delegated to a staff member. The policies for the athletic program may be developed either by the general faculty or the physical education staff. The athletic director is responsible to the director of physical education, who, in turn, is responsible to the president. The cost of the athletic program is included in the physical education budget. Any income is purely incidental and goes into the institutional treasury. Coaching duties are carried on by various physical education staff members.

Scott has indicated the advantages of this type of administrative setup:²

With *one* program there is likely to be more consistent adherence to the educational objectives of the institution and of the department.

With *one* department, narrow departmentalization and specialization are discouraged, and the activities of all phases of the program may be correlated in the interests of harmony, economy, and effectiveness.

With *one* executive, a single staff may be more economically and effectively assembled and assigned to perform the multiple functions required for the conduct of the broad program of physical education for all students.

With *one* staff, responsible to one administrative officer, there may be a greater sharing in the formation of policies governing all aspects of the unified program of physical education. This, in turn, may lead to a greater sense of sharing the responsibility for the successful operation of the whole program.

With *one* executive, facilities may be more effectively designed and constructed in the interests of all students, and more economically and equitably

² Harry A. Scott, *Competitive Sports in Schools and Colleges* (New York, Harper, 1951), p. 239.

assigned to serve the needs of class work, intramurals, and recreational programs for both sexes, and for the accommodation of the program of competitive athletics.

With *one* executive, the equipment for the program may be more economically purchased, centrally controlled, and effectively distributed to meet the physical education needs of all students.

With *one* executive, the indoor and outdoor facilities and equipment may be more efficiently maintained and prepared for the multiple uses of the entire program of physical education for all students.

With *one* executive in a *single* department, with *one* staff housed together and responsible for the conduct of a *unified* program, there can be developed the same kind of group effort, group loyalty, group responsibility, and group morale among staff members as each of the instructors requires of each student who participates in athletic sport for which he is responsible.

Athletics as a separate department. This type of administrative pattern is one in which a separate athletic department is headed by a director who is directly responsible to the president or athletic committee. This type of organization is found more frequently in larger institutions. Such a method of administering intercollegiate athletics was not possible in the early days because well-trained administrators were not available. However, over the years a vast body of material relating to the administration of athletics has been built up. Today, many directors are available who have acquired the techniques and understanding necessary to administer an athletic program.

The advantage of a separate department is more obvious in a large institution. The size of the operation and the amount of money involved are factors which favor separation from the physical education department. It is admittedly more expensive to operate, but big-time intercollegiate athletics usually have the funds for separate facilities and personnel. In many of the larger institutions arrangements are worked out where certain personnel and facilities are shared with the physical education department. When athletic personnel are used in the physical education department, they should be scheduled during the terms when they are not under heavy coaching pressures.

Athletic committees. The second issue referred to above in administering intercollegiate athletics relates to the use of athletic committees. Practices are so varied in colleges and universities that it is

difficult to describe a trend. Some institutions make no use whatsoever of such committees. In other colleges and universities these committees have complete administrative authority over intercollegiate athletics. This latter method of controlling athletics predominated when institutions first took over the conduct of the athletic program. In recent years it has been largely discarded because of its inherent defects. A committee is a poor administrative unit because it is constantly changing. The alumni and student members cannot profit from the experience because their terms are usually only one year in length. Moreover, the committee may ignore all the experience and training of the director. It hardly seems logical for an able, well-trained director to be told what to do and how to do it by a group whose members rarely have an adequate background and understanding of the problems involved.

The advisory athletic committee is probably the most extensively employed and popular type of such plans in use today. This is used both for the separate athletic department and for the unified department which includes athletics. The person responsible for athletics possesses complete authority, but the advisory athletic committee recommends policies to him. Students, alumni and faculty are usually represented on such committees. The advantage of an advisory committee is that all interested groups have a channel through which they can express their convictions about the program to the director. The director possesses complete power, but it is helpful to him to know the reactions of undergraduates, alumni, and faculty to his conduct of the athletic program. Such an advisory committee is objected to on the basis that other departments in the institution do not have them. The justification for their existence, however, is that students and alumni are more interested in the athletic program than in the academic activities of the institution.

Control of Interscholastic Athletics. Interscholastic athletics, like intercollegiate athletics, are controlled on three different levels, namely, the national, state, and local levels. All of these different aspects of control are closely interrelated and complement each other. Each will be discussed in turn.

Control on the National Level. Interscholastic athletics are administered nationally by the National Federation of State High School Athletic Associations. This national organization was developed out of the state athletic associations. The beginning was

made in 1920, when representatives of five nearby state associations met in Chicago to discuss problems which had resulted from high school athletic contests which were organized by colleges and universities or other promoters. The need was evident for a national organization which could operate in areas beyond the scope of the state athletic associations. In 1921, four states—Illinois, Iowa, Michigan, and Wisconsin—formally started the national organization. They were charter members, and the future development of the organization was due in large part to their leadership.

In 1922 representatives of eleven states attended the Chicago meeting. Since this time the National Federation has grown rapidly and, today, only Texas is not a member. By 1940 a national office with a full-time executive staff became necessary and was established.

The purpose of the National Federation is stated in its Constitution:²

The object of this Federation shall be to protect and supervise the interstate athletic interests of the high schools belonging to the state associations, to assist in those activities of the state associations which can best be operated on a nation-wide scale, to sponsor meetings, publications, and activities which will permit each state association to profit by the experience of all other member associations, and to co-ordinate the work so that waste effort and unnecessary duplication will be avoided.

Achievements of the National Federation. The National Federation has accomplished many notable achievements since it was originated. An understanding of these is basic to any discussion of interscholastic athletics.

Abolishment of national championships. In 1934 the National Federation took action to refuse to sanction any meet or tournament which is in the nature of a contest to determine a national high school championship. No such contest has been held since that time, although there have been many attempts to do so. The reasons for the stand of the National Federation were excessive travel and expense for the teams involved, too much interference with school work, and increased pressure upon players, the coach, the school, and community. Consequently, schools which were members of state high school athletic associations affiliated with the National

² National Federation of State High School Athletic Associations, *Handbook: 1956-57* (Chicago, 1956), p. 7.

Federation were prohibited from taking part in such competition. The National Federation took the position that there were no advantages to be gained in competition for a national championship but that there were many disadvantages. If any high school desired more competition, it would be a simple matter to schedule additional games locally.

Regulating interstate contests. The National Federation stipulates that in all interstate competition each school shall employ the rules of its own state athletic association. An interstate contest which involves a round trip exceeding 600 miles for one of the teams is prohibited unless both state athletic associations, through the National Federation, sanction it. Basketball tournaments which involve schools from more than one state are not sanctioned unless the tournament is for an area which is a natural community or when, because of mountain barriers, a small section of the state is isolated in such a way that competition across state lines is essential to the filling of a suitable schedule.

Recommendation of minimum eligibility requirements. After a careful review of all the eligibility requirements of the various state associations the National Federation has recommended what it considers the basic minimum requirements which should prevail. Because of the prestige of the National Federation and its relationship to the state associations, many of the latter groups have voluntarily adopted these minimum standards. This has done much to unify eligibility requirements in the various state athletic associations in the United States.

Opposition to all-star and postseason contests. The National Federation has been cognizant of the abuses which would develop if bowl, all-star, or charity games were to be permitted without limitation. In 1947 the following resolution was unanimously adopted:⁴

1. This group is unalterably opposed to the principle of all-star and out-of-season athletic contests in which high school students or high school graduates of the previous year are participants, because:

- A. Such contests do not harmonize with the generally accepted educational philosophy of high school athletics which emphasizes varied seasonal activities, broad participation, and school direction and supervision.

⁴ *Ibid.*, p. 18.

- B. There are few tangible values, apparent either to the individual or to the selected team as a whole, resulting from such contests.
- C. No practical or satisfactory method has been devised to date for the selection of members of all-star teams to insure that injustices are not perpetrated.
- D. There has been growing evidence of commercialism and exploitation of high school athletes through their participation in such contests. In too many instances such games have been the "market place" in which their "wares" have been displayed before the highest bidder.
- E. Further, it is the opinion of this group that the clothing of all-star and out-of-season contests in the garment of "sweet charity" is insufficient justification for their existence. Experience has revealed that often pitifully small proportions of receipts from such games have been realized for their avowed purposes.
- F. Such contests are likely to imbue immature and inexperienced high students selected for them with the false idea that their athletic prowess is something upon which they should capitalize commercially, rather than its being an endowed talent that is theirs to use for the pleasure and satisfaction they may receive from athletic competition.
- G. In practically all all-star contests with which this group has been apprised, there have been insufficient and inadequate practice periods provided prior to the playing of the games. In football, particularly, it is impossible to condone a practice period of five or six days for a group of boys who, previously, have never played together, especially after a lapse of an eight or nine months' period since previous football competition. Most high school, college, and professional teams require a minimum pre-game practice period of fifteen days or more.

2. Further, it is recommended that states subscribing to the attitude of this group as indicated in (1) give consideration to the adoption of regulatory measures which will prohibit or discourage their member schools, administrative, coaching, or instructor personnel, and registered athletic officials from participation, management, supervision, player selection, coaching, or officiating in any all-star or out-of-season athletic contests in which high school students or graduates of the previous year are participants.

Formulating and publishing playing rules for interscholastic sports. Dissatisfaction with the football rules which were devised for college and university football led, in 1931, to the appointment of a National Federation Committee to draw up rules for interscholastic football. These were published in 1931 and used experimentally in Illinois, Iowa, and Wisconsin. The new regulations proved popular

immediately, and more and more state associations adopted them. At the present time forty-three states are playing under the National Federation rules.

The National Federation publishes an edition of the Official Basketball Rules. These rules are made jointly by a committee which is composed of representatives of the National Collegiate Athletic Association, the Y.M.C.A., the A.A.U., Canada, and the National Federation. This edition contains much supplementary material which aids in the high school program.

The National Federation also maintains Six-Man Football and Soccer rules committees and publishes rule books for these sports. Track and Field and Baseball rule books (Federation edition) are also published.

Adapting playing equipment and regulations to high school boys. Originally, high school athletic competition was patterned after intercollegiate athletics. The same type of equipment was used; the length of the playing periods and the dimensions of the playing areas were similar. It became evident with time that adaptations to younger, smaller participants were necessary. The National Federation took the lead in studying and experimenting with equipment, with the result that the size of footballs and basketball was reduced, the high hurdle was lowered, the discus was made smaller and lighter, the low hurdle race was shortened, and a more satisfactory and less expensive basketball backboard was developed. Not only was the equipment better suited to the capabilities of high school boys but a considerable reduction in cost was effected.

Condemning solicitation of high school athletes. The National Federation adopted the following resolution on solicitation in 1937:¹

The National Federation of State High School Athletic Associations assembled at New Orleans February 20, 1937:

BELIEVES that solicitation of high school athletes by individuals and organizations representing institutions of higher learning is having a definitely detrimental effect: (1) upon the boys so solicited; (2) upon the general high school student body; (3) upon the general public interest in the welfare of education.

FURTHER, that this solicitation of athletes is seldom directed, stimulated or fostered by those responsible for the management of the academic offerings of the institution of higher learning.

¹ National Federation of State High School Athletic Associations, *Handbook: 1954-55* (Chicago, 1954), p. 16.

FURTHER, that certain institutions of learning, both secondary and higher, have discriminated against the accepted standards of academic accomplishment in favor of the athletically inclined student, especially in regard to enforcement of entrance requirements by some of the institutions of higher learning.

FURTHER, that this solicitation of athletes is different in nature and effect from that used to attract students interested primarily in academic education.

IT IS RESOLVED, that the National Federation hereby earnestly requests the co-operation of all representatives of institutions of higher learning in the elimination of all forms of solicitation of boys of athletic ability which differ in manner or form from the ethical practices used by said institutions in attracting all students.

IT IS FURTHER RESOLVED, that the faculties of all such institutions are earnestly requested to hold the athletically inclined students to the same academic requirements imposed upon all other students of the institution, either at entrance or during residence.

IT IS FURTHER RESOLVED, that each member state is requested to pass similar resolutions.

To assist in remedying the problem of college solicitation of high school athletes the National Federation, at the 1950 and 1951 annual conventions, approved Standard #10, which reads as follows: "The solicitation of athletes through tryouts and competitive bidding by higher institutions is unethical, unprofessional, and psychologically harmful to the boy. It destroys the amateur nature of athletics, tends to commercialize the individual and the program, the use of athletic skill for gain, and takes an unfair and unjust advantage of competitors."

The items below are suggested interpretations of Standard #10:

1. The functions of guidance and advisement to assist a student in the selection of a higher institution should be performed by the principal, director or guidance, or designated advisers.
2. Interviews between accredited representatives of higher institutions and prospective applicants for admission should be arranged only through the school guidance department.
3. Tryouts of high school athletes should not be permitted, and the entertainment and transportation of boys to college campuses to display athletic prowess should be prohibited.
4. Transcripts of high school records should be sent only to the admissions office.

* National Federation of State High School Athletic Associations, *Handbook: 1956-57*, p. 16.

5. Standards for admission to higher institutions should apply to the athlete and nonathlete alike.

6. Only bona fide students who are satisfying recognized educational standards in high school or in college should be permitted to compete in athletics.

7. All financial aid to students should be based on demonstrated ability in high school subjects and activities.

- (a) No athletic "scholarships" as such should be awarded.
- (b) All scholarship aid must be administered by the institution itself and not by alumni, civic groups, or other individuals.
- (c) Each institution should publish qualifications for all scholarships offered.
- (d) Scholarships should be limited to actual expenses for tuition, fees, room, board.
- (e) Payment for employment should be made only when services are rendered.
- (f) No grant should be withdrawn because of failure to participate in athletics.

Effecting an agreement with organized baseball on the signing of high school players to professional contracts. The National Federation, since 1944, has negotiated with organized baseball to prevent high school players from signing contracts to play professional baseball before their eligibility for participation in high school athletics has terminated. The current agreement is as follows:⁷

1. No student of a high school shall be signed to a contract by a major or minor league club during the period the student is eligible for participation in high school athletics. In any instance where such eligibility has expired prior to the student's graduation from high school (a) because of the student's age; or (b) because he has completed the maximum number of semesters of attendance; or (c) because the maximum number of seasons has passed in which he was eligible to participate in any major sport, he may thereafter be signed to a contract which does not obligate him to report for service prior to graduation of the class with which he originally entered high school, i.e., until eight semesters after his original entry into the ninth grade.

2. A student who drops out of high school prior to expiration of his athletic eligibility and continues to remain out for at least one year may thereafter be signed to a contract for immediate service provided his withdrawal from high school was not suggested, procured, or otherwise influenced by the club contracting with him, or by any official or employee of such club or of any of its affiliates.

3. Nothing herein shall be construed as prohibiting any major or minor

⁷ *Ibid.*, p. 27.

league club, its officers, agents, or employees from talking to any high school student at any time concerning a career in professional baseball and discussing the merits of his contracting, when eligible therefor, with any particular club.

4. "Tryouts" to which students may be invited may be conducted during the school year, provided that (1) no student shall be permitted to participate in any such tryout unless the principal of his high school, if not employed by a major or minor league club, shall have approved such participation in writing, and (2) provided further that any such tryout must be limited to not more than five high school students.

5. Any contract made in violation of this rule shall be declared null and void, and the offending club (and any club owned by or affiliated with such club) shall be prohibited from signing such player for a period of three years from date of declaration of voidance of such contract. In addition, such club shall be fined \$500, by the commissioner in the case of a major league club, or by the president of the National Association in the case of minor league club, and the official, scout or employee of the offending club who participated in the violation shall be subject to such penalty as the commissioner or the president of the National Association, as the case may be, shall impose.

In addition to the above accomplishments, the National Federation has urged the development of athletic accident benefit plans by the state athletic associations. It has assisted in the development of a program of motion pictures for use in football, baseball, and basketball meetings and for use in school assemblies or service club programs. A national press service was inaugurated to aid editors of state association monthly bulletins. It has also recommended plans for the training, classification, and registration of high school officials.

Control of Interscholastic Athletics by State High School Athletic Associations. The history of interscholastic athletics is a story of a long, difficult struggle to place these activities on a sound educational basis. So many vicious, undesirable practices developed around high school athletic competition that school administrators were forced to take steps to control them in order to preserve their educational values. School superintendents and principals organized state high school athletic associations to control interscholastic athletics because they were unable to solve the problems individually. These organizations deserve most of the credit for the present high plane on which interscholastic athletics are conducted.

The first state high school athletic association was formed in Wisconsin in 1896. Indiana followed in 1903, and Ohio in 1904.

Today, every state has an organization to administer interscholastic athletics. Membership in these associations is usually permitted to any accredited public high school, although in some states any high school which meets the standards for membership is permitted to belong. For each member school the principal must be the responsible spokesman.

These associations are conducted by boards of control which range in size from three to sixteen members. Membership on the board of control is confined in most states to school administrators, but in some states teachers, coaches, school board members, and university professors are eligible for membership. The duties of the boards of control are usually to determine the general policies of the association, to decide the rules of eligibility, and to settle disputes referred to them by various districts or sections of the state into which the association is divided. Every state has an athletic commissioner or executive secretary who has full charge of the clerical, financial, and executive work of the association. Thirty-nine states have full-time executive secretaries; the remainder have part-time executive secretaries. The executive secretary conducts tournaments and meets, keeps detailed accounts of the competition, handles the finances, receives the scholastic records of the competing students, disseminates publicity, and performs other duties. The administrative authority, however, is usually vested in the board of control.

State athletic associations are classified into three types: (1) the voluntary, independent associations, (2) the associations affiliated with state departments of education, and (3) those affiliated with state universities. Approximately two thirds of the associations are of the voluntary type. In the associations affiliated with state departments of education, the control resides with the department of education. In the voluntary associations, school administrators control the program. It is a common practice in these associations for the state director of physical education to be represented on the executive committee.

Functions of state athletic associations. State high school athletic associations vary in the functions they perform. The following functions are carried on by most state associations:

1. Sponsoring athletic-injury benefit programs.
2. Conducting tournaments and meets.
3. Establishing standards for interscholastic athletics.

4. Registering and classifying officials.
5. Sponsoring coaching clinics.
6. Publishing bulletins and newsletters.
7. Interpreting playing rules.
8. Promoting summer athletic programs.
9. Establishing contest regulations.

Financing state athletic associations. A variety of sources of income are available to support state athletic associations. Most states have annual membership fees, with the majority assessing the fee on the basis of school size. Receipts from state tournaments and meets is the largest source of revenue in the great majority of states. Entry fees and fees for registration of officials are negligible from the standpoint of income production.

Local Administration of Interscholastic Athletics. In the final analysis the activities of the National Federation and the state athletic associations are translated to local high schools. The efforts of the state and national organizations are designed to come to fruition in each individual school. However, what happens in the local schools depends to a large extent upon how the program is conducted. The standards which the state and national associations endorse can be defeated by poor local administration.

The superintendent of schools. The superintendent of schools is the individual ultimately responsible for the type of athletic program which is in operation in the schools under his jurisdiction. Although the school board has the final responsibility for all that happens in the schools, it is the superintendent who recommends policies to them. He is also the boards' executive officer, and he is held responsible for the implementation of its policies. In his recommendations to the school board concerning personnel, facilities, and budget, he is instrumental in determining the type of program which will be in operation.

The superintendent should take the initiative in establishing a desirable athletic policy for the local schools. Unless he does so, undesirable elements in the community may develop an emphasis which would be educationally untenable. In every community there are individuals and groups who are more interested in victories and championships than in what happens to the participants. Constant vigilance and determination are necessary to keep the athletic program on a sound educational basis.

The principal. The principal is more directly concerned with the actual operation of the program. He is held accountable by the superintendent for the conduct of interscholastic athletics in accord with the stipulated policies. The conduct of the students at athletic contests is his responsibility. In schools which have athletic committees the principal is invariably a member, frequently the chairman. He possesses veto power over the actions of the committee. The principal should give evidence of his interest in the athletic program by attending various contests. The enforcement of the regulations and policies of the state athletic association is his duty.

The relationship of school administrators to the interscholastic athletic program requires that they be prepared to cope with the problems which develop. The principal and superintendent will make many costly mistakes in their relationships to the athletic programs unless they are familiar with the philosophy, principles, policies, and standards which should prevail. It is an unfortunate fact that few school administrators ever receive proper professional preparation in this important area.

The director of athletics. The director of athletics administers the details of the athletic program. He is responsible to the principal for the conduct of the athletic program in accord with the policies of the school and the state athletic association. He must discharge his responsibilities conscientiously and faithfully, regardless of his own reactions to the policies. (For duties of the athletic director, see p. 239.)

The athletic committee. Athletic committees constitute an important factor in the administration of athletics in many high schools. A study by Adams shows that the larger schools tend to make greater use of athletic committees than smaller schools. His findings were as follows:^a

HIGH SCHOOLS WITH ATHLETIC COMMITTEES

	<i>Large Schools</i>	<i>Medium Schools</i>	<i>Small Schools</i>
Athletic committee in operation	132	84	54
Schools without committees	85	110	120

^a Harry Bennett Adams, "A Report on Current Practices in the Administration of Interscholastic Athletics in 591 Selected Secondary Schools of the United States" (Unpublished master's thesis, University of North Carolina, 1950), p. 77.

The individuals generally serving on such committees were the principal, athletic director, coaches, faculty members, and students. In some schools the dean of boys, superintendent, and a member of the school board may serve. The faculty members, in most cases, are appointed by the principal. The student members are elected by the general student body of each class or appointed by the student council. The duties of athletic committees have been surveyed by Adams and listed as follows:*

DUTIES OF THE ATHLETIC COMMITTEE

	<i>Size of School</i>		
	<i>Large</i> N-217	<i>Medium</i> N-195	<i>Small</i> N-179
<i>The duties of the committee are:</i>			
Policy making	93	57	24
Advisory only	46	40	33
<i>Veto power over actions of the committee exercised by:</i>			
Principal	57	29	26
Board of Education	41	23	7
Superintendent	24	15	15
Athletic director	1	2	3
<i>The more common duties of the committee are:</i>			
General policies	32	22	10
Approve budget and finances	36	13	8
Approve schedules	24	14	11
Approve awards	26	12	10
Approve purchase of equipment	9	7	5
Approve admission prices	8	3	5
Determine eligibility	4	4	2
Publicity	2	3	2
Advise and help raise funds	1	2	4
Plan rallies	2	3	1
Ticket sales	0	4	1

MEDICAL SUPERVISION OF ATHLETICS

Protecting the Health of Athletes. In citing the values of athletics, coaches invariably mention the contribution which is made to health. There can be no doubt that athletics, if well conducted, will make a significant contribution to the health of the players.

* *Ibid.*, p. 80.

Unfortunately, however, in many schools, the health of the athlete is not given the consideration it merits. Outside of a few universities, colleges, and high schools, the method of conducting athletics from the health standpoint leaves much to be desired.

The medical examination. The medical examination is the first and most important measure to be considered in the proper health supervision of athletics. All athletic aspirants should be examined to determine their physical fitness for participation in athletics in general and also in any one sport in particular. The examination should be made by a physician who has the time and facilities to do his task properly.

The standard of a medical examination for participants in interschool athletics is generally accepted. Some small schools still do not require such an examination, but these represent a very small minority. Most of the state high school athletic associations require a medical examination prior to participation in interscholastic athletics. A similar practice is standard procedure in practically all colleges and universities.

The real problem with respect to medical examination is to get an adequate one. A great many are merely cursory inspections of the heart. A five-minute examination in which the pupil does not even strip cannot be considered satisfactory. If the examination is to be thorough enough to significantly reduce possibility of injury, special attention should be devoted to the age, weight, nutrition, bones, feet, eyes, nose, throat, abdomen, glands, heart, lungs, and general health of every individual. This should include urinalysis and blood-pressure tests.

In colleges and universities the medical examination is usually given by the physician or physicians in the health service or by physicians engaged by the athletic department. Almost invariably, these examinations are provided without charge to the participants. The customary practice in secondary schools is to have either the school physician or a private physician employed by the school give the medical examinations. However, in many secondary schools the candidates are expected to obtain the examination from their family physician on special forms supplied by the school or the state athletic association. In this latter case, the cost of this service is borne by each student. Not infrequently, local physicians volunteer their services for the medical examination.

Treatment of athletic injuries. The team physician is the key man in the treatment and care of the injured athletes. It is preferable to have as team physician an individual who has had specialized training in orthopedics. Knowledge of athletic contests and their demands is also an important prerequisite. However, smaller institutions with limited funds are often forced to use the doctor they can afford. Many doctors volunteer or accept very small token payments for treating injured athletes because of their interest in the program.

Many schools have a trainer who serves as an adjunct to the team physician. He performs many valuable services, such as taping, bandaging, massaging, supervising the use of various therapeutic equipment, like the whirlpool bath and infrared lamp, administering first aid, and supervising special exercises which have been prescribed by the physician. The trainer in large colleges and universities is a full-time employee. In smaller colleges and in most high schools he is probably the coach or some other faculty member who has had special training for these duties.

The trainer is not a substitute for the physician. The physician should be the one to go upon the field to examine an injury and determine the advisability of continuing play. It is also the physicians' responsibility to decide when an injured student has recovered sufficiently to return to practice. It is essential that the trainer never invade the doctor's area of responsibility. He must studiously refrain from diagnosing injuries and prescribing treatment.

Larger and wealthier institutions can afford to have a physician attend all practice sessions as well as regularly scheduled games. Most schools cannot meet this standard, but they should at least have one in attendance at home games, particularly in football, basketball, wrestling, and other vigorous sports where there is a likelihood of injury. Adams points out that 92 per cent of the large high schools, 70 per cent of the medium high schools, and 49 per cent of the small high schools require the attendance of a physician at home contests.¹⁰

The coach's contribution to health. Since the coach has so frequently proclaimed the health values of athletics, he should, to be consistent, conduct athletics with the health of the players constantly in mind. As health is an important objective of athletics, it is difficult to justify

¹⁰ *Ibid.*, p. 54.

various unsanitary practices commonly associated with athletics, such as the practice of sliding a dirty towel across the floor for the use of an entire team.

The continued use of filthy equipment merely for the sake of superstition is unwarranted. Dirty floors, locker rooms, shower rooms, and wrestling mats are not in harmony with good health. Excessive schedules are condemned even more than these unhygienic practices. It seems incompatible to hold up health as an objective and yet schedule games before the players have had the opportunity to get into condition. A minimum of three weeks of practice should be required before the first game in football and basketball. The practice of allowing high school boys to participate in three or four sports throughout the year has been bitterly denounced, and there appears to be considerable evidence that the denunciation is justified. In some states and in many conferences, players are limited to two sports. The values of "tapering off" after a hard season of cross-country, track, basketball, and wrestling are widely recognized but rarely practiced. Although conditions in school athletics have improved considerably in recent years, they are still far from ideal. When the philosophy "to win at all cost costs too much" becomes widely prevalent, the health objective of athletics will be more fully realized than it is today.

Interscholar football results in considerably more injuries than any other sport. Many of these injuries, however, could be prevented if football were conducted properly. The following table showing the causes of injuries in colleges will make this point clear.¹¹

INJURIES CAUSED BY CONDITION OF FACILITIES

<i>Cause</i>	<i>No. of Accidents</i>	<i>No. of days lost</i>	<i>Average days lost</i>	<i>Rank by average days lost</i>
Surface of field	38	295	7.8	15
Area too small	2	28	14	4
Tripping over an object	2	9	4.5	27
Equipment incorrectly erected	2	13	6.5	20.5
Weather conditions	13	154	11.8	8
Poor officiating	8	134	16.8	1
Other poor facility causes	2	13	6.5	20.5

¹¹ Marvin A. Steven, *The Control of Football Injuries* (New York, Barnes, 1933), p. 227.

INJURIES CAUSED BY CONDITION OF INDIVIDUAL

<i>Cause</i>	<i>No. of Accidents</i>	<i>No. of days lost</i>	<i>Average days lost</i>	<i>Rank by average days lost</i>
Poor physical condition	15	191	12.7	15
Fatigue	8	91	11.4	9
Overtraining	1	4	4	28
Lack of training	8	47	5.9	24
Lack of skill	50	367	7.3	18.5
Collision with another player	211	1592	7.6	16.5
Old injury	17	245	14.4	2
Tripping over another player	13	159	12.2	7
Opponent tripping over injured	7	38	5.4	26
Carelessness, forgetfulness	26	265	10.2	12
Relaxation of injured	10	136	13.6	5
Missed signals	4	12	3	29
Unnecessary roughness	80	738	9.2	13
Improper equipment	67	389	5.8	25
Unavoidable	406	4251	10.5	10.5
Other individual causes	41	582	14.2	3
Not specified	306	1929	6.4	22
Kicked by an opponent	48	365	7.6	16.5
Kneed by an opponent	16	44	2.8	30
Slugged by an opponent	2	0	0	31
Stepped on by opponent	35	257	7.3	18.5
Cleated shoes	20	119	6	23
Under a pile-up	17	114	8.5	14
Fell on ball	2	21	10.5	10.5
<i>Total</i>	1477	12,632	—Average days lost for all accidents 8.6	

Athletic Accident Benefit Plans. Colleges and universities assume the cost of most of the athletic injuries which members of intercollegiate squads sustain.¹² A few of the larger high schools do likewise, but most schools assume no responsibility for the injuries incurred in interscholastic athletics. Within recent years state high athletic associations have developed athletic accident benefit plans to reduce the financial burden upon the parents of the injured participant that the treatment of athletic injuries may impose. These athletic benefit plans have proven so successful that the efforts of the state associations in this regard are generally considered among their most significant undertakings.

¹² The National Collegiate Athletic Association administers a group insurance program whereby member colleges can provide catastrophe medical coverage for athletes injured in practice, play, or transport. This plan provided coverage only for very serious injuries which require unusually heavy medical expense.

The athletic accident benefit plans have produced the following beneficial results:

1. The cost of medical and dental care of injured athletes to their parents has been greatly reduced. This has been accomplished by spreading the cost over all the participants. In addition, in some states earnings from other sources have been applied toward the reduction of this expense.
2. The athletic benefit plans have brought about a great increase in the number of schools which required a medical examination of all participants in interscholastic athletics.
3. Where necessary immediate diagnostic and medical attention has been available. When the cost of medical care had to be borne entirely by parents, some with limited means were loath to incur medical expense.
4. The reporting of all injuries was required in the various accident benefit plans. Among the data requested was the cause of the injury. With these facts school men were able to eliminate some of the most hazardous features of the various sports by changing the rules. This has been particularly true of football.

Forty-five states operate some sort of athletic accident benefit plan. The plans are administered in a variety of ways. In Florida, Georgia, Kentucky, Michigan, Minnesota, Montana, North Dakota, Oregon, Wisconsin, and the New England states, the plan is administered as a function of the state high school athletic associations. Seventeen states (Alabama, Arizona, Arkansas, Colorado, Idaho, Kansas, Mississippi, Nebraska, Nevada, New Mexico, Oklahoma, Tennessee, Texas, Utah, Washington, West Virginia, and Wyoming) have designated the Denver Security Life and Accident Company to administer the athletic benefit plan formerly operated by the various state athletic associations. Delaware, Illinois, Indiana, Louisiana, Maryland, Missouri, New Jersey, Pennsylvania, South Carolina, South Dakota, and Virginia have made similar arrangements with other life insurance companies. In California, Iowa, New York, and Ohio the state high school athletic associations discovered that they were unable to operate a mutual benefit plan without incorporating as a benefit company. This was done by vote of the membership of the state associations. Officers were elected, and the companies are operated on a nonprofit basis.

In each athletic accident benefit plan coverage is provided for supervised practices and regularly scheduled interscholastic contests. Thirty-eight plans provide coverage for injuries sustained in

intramural competition. Compulsory physical education classes are or can be covered in thirty-seven plans. Injuries received during transportation to and from contests and practices are covered by twenty-six plans, if the transportation is school provided or school approved and under the supervision of qualified school personnel. Thirty-two plans pay benefits for locker and shower room accidents. Fourteen of the plans provide for the inclusion of coaches in the coverage offered. In Wisconsin the coverage includes elementary school students and students in supervised athletic programs conducted during the summer months.

All of the plans pay medical, dental, and X-ray benefits for injuries suffered under conditions outlined by the terms of the plans. Almost all of the plans provide hospitalization benefits.

In Nevada an appropriation from the state legislature defrays the entire cost of the accident benefit plan, which is administered by a commercial company. In all other plans students are required to pay a premium. The cost of the premiums varies with the different plans. For example, in one state the student fee is \$2.00 for football and all other approved sports, including physical education and intramurals. Excluding football, the fee is \$1.00. Football requires a higher premium than any other sport. However, even for football the premium varies from \$1.00 to \$5.00.

In general, the private insurance companies charge a higher fee. Part of the fee, however, is absorbed by the schools in some states but not in others. In most of the state association benefit plans the member schools are charged a fee. In some states funds from state tournaments are used to help defray the expense of accident benefit plan. These additional sources of revenue contribute to the lowered premiums of the state association plans. Because of the higher premiums the private insurance plans usually pay higher benefits and provide greater coverage for injuries.

Wisconsin Interscholastic Athletic Association Athletic Accident Benefit Plan. The Wisconsin Interscholastic Athletic Association has been the pioneer in the development of athletic accident benefit plans. Under the leadership of P. F. Neverman, executive secretary of the association, the first plan was initiated in 1930. Since that time the program has grown steadily, with a variety of new features being introduced from time to time. The benefit plans in many other states have been patterned after that in Wisconsin.

The Wisconsin Association has both group and individual plans for protecting participants in interscholastic athletics. The group plan enrolls a school for athletic protection, and all boys in the school are covered. Each pupil, regardless of whether he is participating in athletics, must pay a fee of 60 cents. In addition, each school pays a premium, the amount of which depends upon the size of the school. Approximately 70 per cent of the high school athletes in Wisconsin are covered by the group plan. The remainder are covered by the individual plan. Under this plan the student pays the premium, which for all sports amounts to \$3.50. For all sports except football the fee is \$1.25.

Wisconsin also has a separate plan which provides coverage of all students without reference to athletic competition. This is known as the Pupil Accident Benefit Plan, which may cover all the students in a school or all the pupils in an entire school system. The fee is 60 cents per pupil. All pupils must be enrolled. In this case the school does not pay a premium. The coverage includes all accidents which happen in school except those involved in the interscholastic athletic program.

Another unique feature is the athletic accident program which is offered during the summer months. For a 50-cent fee a student is covered while he participates in summer playground recreation and sports programs approved by the Wisconsin Interscholastic Athletic Association. Approved programs are those which are publicly supported and the American Legion baseball program. Any boy or girl between the ages of four and twenty is eligible, provided there are at least twenty individuals enrolled in each group.

The 1956 schedule of benefits for the various plans described above is indicated in Appendix C (see p. 543).

ELIGIBILITY REQUIREMENTS

Importance of Eligibility Requirements. Athletic associations and conferences have always been concerned with the eligibility requirements of those who take part in interschool competition. This problem was instrumental in the formation of these groups and is today one of their chief concerns. Standardization of eligibility requirements was necessary to equalize athletic competition. Our entire structure of interschool athletics is based upon uniform eligibility

requirements. Equitable competition and educational outcomes would be impossible without common standards.

The Amateur Rule. The most frequently stipulated eligibility requirement is that each individual must be an amateur in order to compete against other schools. An amateur is defined by the National Collegiate Athletic Association as one who engages in sports solely for the physical, mental, or social benefits he derives therefrom and to whom the sport is nothing more than an avocation.

Amateur standing may be lost by:

1. Playing under an assumed name.
2. Using knowledge for gain (officiating, coaching, tutoring).
3. Receiving money or board for playing.
4. Competing with professionals.
5. Competing for prizes.
6. Selling prizes.
7. Betting on competition.
8. Issuing a challenge to compete for money.
9. Playing on an outside team where admission is charged.
10. Receiving money in excess of actual expenses.
11. Signing a contract to play with a professional team.
12. Receiving consideration for connecting oneself with any athletic organization.

Many heated debates have been precipitated on the subject of amateurism in school athletics. There are those who protest bitterly against barring from school competition a boy who has been paid at some time for his athletic ability. They claim that the amateur code came to us from England, where it originated to preserve sports for the aristocracy by keeping out of competition those who had to work for a living. Such a code is out of place in a democracy, they aver. These opponents also point out that the amateur rule does not operate for the other school subjects, such as music, art, speech, or literature.

As a result of the amateur rule, much subterfuge has been resorted to for the purpose of evading it, in spirit if not in letter. The purpose of the rule, ostensibly, is to prevent the individual who has sufficient skill to command a price for his services from competing against others who do not have this degree of skill. The opponents of the rule advocate more modern and educationally sound means of classifying players and equalizing competition. There are some who protest

against declaring an individual a professional in all sports if he professionalizes himself in one sport. If a boy should be paid for summer baseball or professional football, why should he be barred from basketball and track if he is eligible according to all other standards?

Colleges and universities have gradually been moving away from the strict interpretation of the amateur rule. In several conferences it is legitimate to provide tuition, board, room, and limited expense money for athletes. A certain amount of work is required for this financial assistance, although such work is not usually done during the competitive season.

High School Eligibility Regulations. In addition to the rule on amateurism other eligibility regulations for interscholastic athletic competition are:

Age. The trend in high schools is definitely in the direction of reducing the upper age limits at which boys may participate in interscholastic athletics. Not many years ago the upper age limit in most states was twenty-one years of age. Today, the upper age limit in twenty-six states is nineteen years. In thirteen of these states no further competition is permitted after the nineteenth birthday if it comes before September 1. Otherwise, students may compete during the balance of the school year. In the other thirteen states a boy may compete during a sport season if his birthday occurs before the sport season. In twenty states athletes become ineligible upon their twentieth birthday. In two states competition is permitted if the twentieth birthday is after September 20.

Attendance. Forty-six states limit the amount of competition by any student in any sport to four years. The remaining two states set the limit at three years. All states consider the student ineligible after he has attended a four-year high school eight semesters or a senior high school six semesters. Attendance of fifteen days is regarded as a semester.

Entrance dates. In the great majority of states the period of enrollment ranges from ten to twenty days after the opening of school, after which no student may enter and be eligible during that semester.

Residence and migration. All states rule that the student becomes ineligible for a year or one semester when he changes from one school to another, unless there is a bona fide change of residence.

When the family actually moves into the new school district, the student usually becomes eligible immediately, providing he was in good standing at his original school. An exception to this occurs when evidence becomes available that undue influence was used to bring about the change in residence. This has become a problem of sufficient magnitude to cause some state associations to establish regulations against it.

Participation on nonschool teams. The great majority of state athletic associations have regulations which forbid a member of a school athletic squad to compete on a nonschool team during the season. Several states have the regulation that outside competition may be permitted if approved by the school principal. However, such permission would only rarely be granted.

Physician's examination. Twenty-nine states require a physician's certificate stating that the student is physically fit to participate in interscholastic athletics. It is surprising that such an essential and universally recognized practice is not mandatory in all schools.

Scholastic requirements. The great majority of states require that the student must have completed with a satisfactory grade a designated number of courses—usually three—during the preceding semester. Nearly all states also require that the student be doing passing work in three full-credit subjects during the current semester. This eligibility regulation is based on the assumption that satisfactory achievement in the various academic courses is the primary purpose of the secondary school. Students are prevented from participating in other school activities until they can demonstrate adequate accomplishment in these essential courses. Participation in athletics is thus a reward for successful scholastic attainment. Students who fail to do passing work obviously need to spend more time and effort in study. Because athletics are time-consuming and strenuous, participation in them should be denied to those who cannot carry both programs successfully.

In 1938 New York eliminated the scholastic eligibility requirement on the ground that interscholastic athletics are an integral part of the physical education program and no student should be prevented from gaining the benefits of participating in them. This move eliminated in this state the distinction between curricular and extracurricular activities. In effect, it gave athletics equal status with

the academic subjects. It eliminated the questionable practice of employing scholastic eligibility as a disciplinary measure. It recognized that athletic participation is just as important for a poor student as for a good one.

Other states have not followed the lead of New York in this direction. School men in general are satisfied with the academic eligibility requirement. They feel that it is simpler to administer uniformly than the New York regulation. They have seen this requirement operate to the advantage of many athletes. The number of students who are prevented by this requirement from participating in athletics is negligible. Although the elimination of scholastic eligibility appears sound philosophically, school administrators are not convinced that it is a practical measure at the present time.

Awards. Twenty-six states stipulate that the utilitarian value of an award to any player may not exceed the stated limit, which varies from \$1.00 to \$5.00. Nine states restrict the award to a school letter.

Undue influence. Sixteen states have regulations which declare a student ineligible if it is proven that undue influence has been used to get the student to enroll in a particular school.

Parents' consent. Twenty states report that it is necessary for the student to obtain the consent of his parents in writing before he is eligible for participation in interscholastic athletic contests. Most states using this rule provide a special form for the student to take home for his parents' signature.

College and University Eligibility Regulations. The eligibility rules for intercollegiate competition are much the same as those for high schools. In the larger conferences, the freshmen rule is usually observed. Some schools, however, have interschool contests for freshmen, and others do not. This naturally limits the player to three years of participation on a varsity squad. This must be completed within a period of five consecutive years. Certain entrance requirements are maintained. There is not the uniformity of scholastic requirements in colleges that there is in the secondary schools. Most institutions require passing work in two thirds to three fourths of the normal student load, in both the previous and the present semesters. Normal progress toward the degree is required, and varsity athletes are expected to graduate with their class. Outside competition on teams not representing the institution is quite uniformly prohibited.

AWARDS

Value of Awards. The practice of granting awards to those who compete in interscholastic and intercollegiate athletics is found in practically all schools. The custom is in accord with the universal practice of honoring successful or outstanding performance. In the schools, it corresponds to the honors, keys, pins, emblems, insignia, and the like which are granted for meritorious achievement or service in either curricular or extracurricular activities. This practice has received considerable condemnation on the ground that the student should engage in an activity for itself rather than for any outside rewards. However, when the awards are intrinsically rather than extrinsically valuable, the objection to them is not so justifiable. When an award has only a sentimental value attached to it instead of a monetary or utilitarian value, it is unlikely that the award will become the sole goal of the activity. As an incentive to engage in worthwhile activities, it seems that an inexpensive award is perfectly justifiable.

The school letter has replaced the olive wreath of the ancient Greeks as the award for athletic performance. In high schools the letter constitutes the customary form of award, although some schools also award a sweater with the letter. The majority of states follow the rule of the National Federation of State High School Athletic Associations and limit the cost of their awards to \$5.00 or less. In colleges a sweater and letter are usually presented to the boy who qualifies. Some schools grant a sweater and letter for each achievement; others merely present the sweater and letter for the first award in a sport and only the letter in subsequent qualifications. Some universities and colleges permit a choice between a sweater and letter and a blanket carrying the school letter for the second award in the same sport. Many high schools having freshmen and class teams reward the qualifying players with class numerals. Numerals and sweaters are usually awarded to freshmen in institutions having the freshmen rule.

Major and Minor Awards. The advantages and disadvantages of major and minor letters have been much discussed. Some colleges and universities have no distinction between sports and grant the same letter for all sports. This is justified on the basis that a boy who has sufficient ability to represent his school is entitled to an award.

The chief argument brought against this practice is that some sports, football particularly, demand much more from the boy than fencing, golf, tennis, and some of the other sports. The majority of colleges and universities grant the minor letter for those sports considered minor. However, a number of schools follow the practice of presenting major awards for outstanding performances in minor sports. An example would be winning the conference championship in golf or tennis.

The majority of high schools award the same letter to all who qualify, regardless of sport. However, many differentiate the sports into major and minor categories. This is done much more frequently in the larger high schools. In these schools the awards for minor sports are either a smaller monogram or the same size monogram as is awarded for the major sports but with a letter designating the minor sport.

The student managers of the various teams are usually awarded letters or insignia of different types. Frequently they are given the same type of award that the players receive. A more common award, however, is a major monogram with the designation "M" or "Mgr" on its face or directly underneath it.

Recommendations for awards are initiated by the coaches, usually on the basis of the established requirements. Generally, the coach's recommendations are acted upon by the athletic director or athletic council or both. The awards are ordinarily presented at some ceremony, such as a banquet or student assembly.

Requirements for Awards. The requirements for letters differ greatly in different schools. The following are the major letter requirements for a number of colleges and high schools:

FOOTBALL

1. Participation in two conference games.
2. Participation in three conference games.
3. Participation in half of the quarters of major games.¹³
4. Participation in half of the total number of quarters.
5. Participation in 6 quarters of major games.
6. Participation in 6 full quarters or their equivalent in time in major games.

¹³ Major games are usually conference games or the equivalent.

7. Participation in one full half in each of 3 major games and participation in one other game.
8. Participation in 2 full halves with one or more specified teams.
9. Participation for a total time equal to 10 minutes per major game.
10. The recommendation of one or more specified authorities for meritorious service.
11. An award to seniors for loyal service during the three years of their eligibility upon recommendation of the coach.

BASKETBALL

1. Taking part in one half of major games.
2. Playing a total of 60 minutes.
3. Playing a time equal to 10 minutes per conference game.
4. Playing 6 full halves in conference games.
5. Playing 8 full halves in conference games.
6. Playing in half the total number of halves.
7. The recommendations of one or more specified authorities for meritorious service.
8. An award to seniors for loyal service during the three years of their eligibility.

TRACK

1. Winning a first in one or more specified meets.
2. Winning second or better in one or more specified meets.
3. Winning a third in one or more specified meets by seniors.
4. Placing first in one or more specified meets. (To all members of a relay team.)
5. Winning a place in the conference meet.
6. Breaking a school record in competition.
7. Winning 10 points in conference competition and not all against same team.
8. Winning 18 points in two seasons.
9. Winning 20 points in three seasons.
10. The recommendation of one or more specified authorities for meritorious service.
11. To seniors for loyal service during the three years of their eligibility.

BASEBALL

1. Playing in 50 per cent of total innings of all conference games.
2. Playing in 50 per cent of the conference or other specified games.
3. Participation (4 full innings) in at least two thirds of the major games.

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2. Participation in three conference games.
3. Participation in half of the quarters of major games.¹²
4. Participation in half of the total number of quarters.
5. Participation in 6 quarters of major games.
6. Participation in 6 full quarters or their equivalent in time in major games.

¹² Major games are usually conference games or the equivalent.

detail and include such data as date of birth, year in school, number of semesters in athletics, and number of subjects passed the previous semester and passing the current semester. Most state athletic associations also require member institutions to submit an eligibility list to the association office.

Much the same procedure is followed in most colleges and universities. In some of the larger conferences the eligibility lists are sent to the conference commissioner, who checks the status of all players on the list.

Securing officials. Poor officiating cannot be condoned. There is an ample supply of capable officials, and there is no justification for securing poor ones. The practice of "trading games" has led to much poor officiating. Instead of being selected on the basis of his ability, an official is chosen on the basis of his willingness to reciprocate. Furthermore, the practice of trading games leads to suspicions of favoritism. For the sake of the players and the game, good officials should be obtained.

The usual practice in selecting officials is for the two schools to agree upon certain individuals. The athletic director of the home institution initiates the matter by sending a list of approved officials to the athletic director of the visiting school. As soon as agreement has been reached, contracts should be sent to the chosen officials. Such contracts usually specify the date, time, place, assignment, and financial arrangements. The athletic council of the school should finally approve all officials selected. It is recommended that negotiations for officials begin early. The better officials are engaged many months in advance of the opening of the season.

To promote uniformity in the interpretation of playing rules, as well as to give school administrators the assurance that only qualified persons are in control of their contests, many states have established plans for the registration and classification of all persons who desire to become officials. Only men who meet these standards are permitted to officiate in interschool competition. As a result, the players, the schools, and the spectators benefit from a more efficiently handled contest.

Most states require all persons who desire to officiate in high school contests to register with the state association secretary. Member schools are required to use only registered officials. The officials must renew their registration annually. Ordinarily, officials are

required to attend an annual rules interpretation meeting prior to the opening of the season. Because of deaths to officials while working, the Pennsylvania State Association has instituted the requirement of an annual physical examination.

A number of states have a plan for the classification and rating of officials. Some states also have the officials rate the schools. These rating scales, judiciously used, will prove valuable in improving the conduct of interschool contests and raising the standard of officiating. The official rates the sanitation, lighting, and ventilation of the gymnasium, as well as the attitude of the coach, the principal, the players, and the spectators toward the opponents and officials. Rubin has developed an excellent rating scale which might well be used by associations, conferences, and coaches to rate the ability of basketball officials.¹⁴ (See rating scale on the opposite page.)

Some colleges and universities secure their officials through the office of the conference commissioner, who makes the assignments from the list of approved officials. To get on the approved list the officials must pass rule examinations and demonstrate a satisfactory degree of competence in trial officiating. The larger conferences conduct rules interpretation meetings and carefully supervise the work of the officials. In many small colleges it is necessary to resort to the procedure of submitting a list of officials to the other institutions and deciding upon mutually satisfactory individuals.

Competent officials are necessary for women's athletic contests. Women, rather than men, should be in control of girls' and women's sports. They are better acquainted than men with the standard rules for women's athletics. In addition, they are more certain to be aware of special considerations, such as health safeguards, which may arise in the management of a woman's contest. The National Section for Girls' and Women's Sports has an Officiating Rating Committee which certifies officials. The committee is organized in various sections of the country, and it is possible for any woman who desires to take the tests. Officials who have been approved by this committee are undoubtedly well qualified.

Arranging team travel. The athletic director must take care of a variety of details in connection with team trips. He should consult

¹⁴ Robert Rubin, "Rating Scale for Basketball Officials," *Journal of Health-Physical Education-Recreation* (January, 1936), p. 33.

with the head coach on some of the important details, such as the menu, the time of arrival and return, the hotel, and the like. Many directors permit the team managers to handle most of these details, but the responsibility still remains with the athletic director. (For legal implications of travel, see p. 460.)

The squad should leave together, stay together after they arrive, and return home together. It is standard procedure not to permit players to return home with any other individuals except their parents. It goes without saying that the coach should always accompany his squad.

All details of the trip should be arranged in advance. All the players should know who is on the traveling squad and the time and place of departure. Parents should be notified of the details of the trip. Some coaches obtain the permission of parents for their son to take the trip. The hotel, transportation, and eating arrangements should be prepared well ahead of time.

Money should not be given to the players for expenses. It is better for the coach or manager to handle the funds on trips and defray all the expenses which are incurred. He should have sufficient cash available to meet all the expected expenses of the trip. He should receive receipts for all funds expended. He is expected to account for all expenditures upon his return. Ordinarily, the hotel and transportation costs are billed to the school.

It is standard procedure that the players assume responsibility for their personal equipment. Duffle bags are usually provided for this purpose. The remaining equipment, such as balls, first-aid supplies, helmets, and blankets, is the responsibility of the student managers. They also need to check the players carefully to see that they do not forget their personal equipment.

If the trip can be made in several hours it is preferable to make it on the day of the game. Not only is this policy less expensive but it is better for the players. They eat and sleep better at home and are more relaxed when they are in familiar surroundings.

Student manager system. Student managers render invaluable services to athletic directors and coaches. Practically all high schools and colleges and universities use student managers. When a good manager is available, he is a joy to both the coach and athletic director because he relieves them of many responsibilities.

The position of student manager is a hard and time-consuming one. In addition, it frequently appears to be a thankless one. However, the student stands to benefit in a variety of ways. He is recognized by his fellow students for his unselfish service and contribution to the team. In many schools the head managership is considered one of the most coveted position. The manager learns how to work with a variety of people. He benefits from the responsibility he carries and from the lessons he learns as he does his job.

A good manager must be dependable, thorough, prompt, and resourceful. His personality is especially important because he must get along well with the players, coaches, the athletic director, and all others with whom he comes into contact. He must have a mind for details. It is essential that he be a good student because the job is very time consuming and will reduce the number of hours available to him for study.

The manager is generally appointed by the athletic director or coach of the sport concerned. Usually, the coach and athletic director have reached an agreement on the candidate beforehand. Frequently, the selection is made on a merit basis. This last method is preferred in the larger institutions where a number of candidates are available. This method operates by having a number of sophomore managers from whom two junior managers are selected. One of the junior managers is then selected as senior manager. In smaller schools the athletic director and coach consider themselves fortunate if they have any volunteers.

Student managers perform a wide variety of duties. Some of the common ones are:

1. Recording the daily attendance.
2. Bringing all the equipment to and from the practice field.
3. Caring for the equipment during practice.
4. Keeping a list of the addresses, phone numbers, locker numbers and combinations, and class schedules of all squad members.
5. Officiating practice games.
6. Checking on players' eligibility.
7. Arranging for trips, meals, and hotel.
8. Rendering a report of all expenditures after a trip.
9. Packing various items of equipment for trips and assure that the equipment is available.
10. Checking that all players have their personal equipment on trips.
11. Supervising the work of the assistants.

12. Attending to the needs of visiting teams and officials.
13. Recommending his successor to the athletic director.
14. Being available to assist the coaches and athletic director in any way they request.

Arrangements for scouting. Scouting is accepted today as an essential part of interschool football and basketball. It is no longer regarded as spying and unethical but is approved and regulated. The scout, usually an assistant coach, calls for his tickets at the athletic department office and makes his presence known to the team he is scouting. He is provided with seats in the press box and is shown every courtesy. His purpose is to discover the basic offensive and defensive formations, the trick plays, and the abilities and peculiarities of the team. Some coaches exchange formations or films with each other in order to dispense with scouting. However, scouting, as it is conducted today, is the best assurance against suspicion. Most of the no-scouting agreements have been abrogated because of the difficulty incurred in preventing information concerning an opponent from reaching the coach and the players.

The chief problem with scouting today is to regulate it. There is a trend to scout each opposing team not more than twice. A further limitation is to permit only two representatives to scout a game at one time. Many coaches consider it unethical for coaches to make scouting reports, game films, and coaches' analyses of games available to other schools.

Supervision of coaching staff. The athletic director has the responsibility of conducting the athletic program in accordance with the policies of his institution and the regulations of the conference or league to which his school belongs. In addition, compliance with state and national athletic association regulations is required. He must be alert to the many policies and requirements and observe them in spirit as well as in letter. This involves, among other things, the supervision of the various members of the coaching staff.

Forty-five state associations permit only certified teachers to coach in secondary schools. Most colleges and universities follow the same practice. Experience has demonstrated that it is easier to control athletics when the coaches are bona fide faculty members. Their professional preparation is such that they understand and appreciate the purposes of the school and the necessity for the various regulations to govern athletics.

The quality of the athletic program is determined more by the caliber of the coaches than by any other consideration. This fact makes their selection a vitally important matter. Unfortunately, coaches are too often chosen on the basis of their technical competence. The character and ideals of candidates receive too little attention. Ideally, the coach should understand his sport thoroughly. He should know boys and be an effective leader. He needs to be a skilled teacher, with the ability to develop sound fundamentals and well-co-ordinated offensive and defensive team play. He must realize that athletics are a part of the school experiences and they must therefore be conducted to achieve educational objectives. He must appreciate that sports exist for the education and development of boys rather than that boys exist for the winning of games.

Good coaches are distinguished by their observance of the following principles:¹⁸

1. They recognize that coaching is teaching.
2. They make their work an integral part of the school program, giving special attention to its educational contribution.
3. They insist on the enforcement of all rules of athletic eligibility and seek no favor for athletes.
4. They are fair and unprejudiced in relationships with students.
5. They pay careful attention to the physical condition of players at all times.
6. They see to it that only competent game officials are selected and support their decisions.
7. They teach students to use only legitimate and ethical means in trying to win.
8. They counteract rumors of questionable practices by opponents.
9. They seek to prevent gambling, obscene language, and other offenses against honesty and decency.
10. They set good examples for boys to follow.
11. They help student athletes to understand that they are neither more nor less important than their fellow students.

Administration of Athletic Contests. One of the most important responsibilities of many athletic directors is the management of home athletic contests. This task must be done well because the public, students, and visiting team will resent and be critical of

¹⁸ Educational Policies Commission, *School Athletics* (Washington, D. C., National Education Association and American Association of School Administrators, 1954), p. 61.

inefficient management. Poor administration of athletic contests will eventually result in reduced income from gate receipts.

The efficient management of a home game is dependent upon careful planning. Well-managed athletic contests do not accidentally happen—they are as efficiently managed as they are planned. The chief difficulty in the administration of contests is to handle the multitude of details which is involved. These details are known but it is easy to forget or to overlook some of them. For this reason some athletic directors employ a check list. Such a check list includes all the details which must be handled in the management of a contest. After a detail has been discharged a check is made to indicate the fact. Such a scheme should eliminate inefficiency in athletic contest management.

The following check list for football can be adapted to other sports. This check list presupposes the completion of various arrangements prior to the opening of the season. Such details as the engagement of the officials, procurement of equipment, preparation of publicity materials—posters, schedules, programs, and the like. Procurement of equipment, arrangement for a physician, ordering of tickets and other necessary supplies, and repair and improvement of facilities must be taken care of far in advance of a particular game.

CHECK LIST FOR FOOTBALL

I. WEEK OF GAME

A. *Personnel*

- () 1. Secure student help and arrange to meet them at definite time and place on day of game.
 - () ticket sellers; () ticket takers; () program sellers;
 - () concession salesmen; () ushers; () guards; () parking attendants; () scoreboard operators.
- () 2. Complete arrangements for police.
- () 3. Assign managerial duties (visiting team, officials, home team).
- () 4. Arrange for physician.
- () 5. Write officials and indicate when and where to report.
- () 6. Arrange for scorer and timer.
- () 7. Obtain announcer for public address system.

B. *Publicity*

- () 1. Advertising posters distributed.

- () 2. Daily press releases.
- () 3. Program material submitted to printer by Tuesday.
- () 4. Press box arrangements completed.
- () 5. Complimentary tickets distributed to press and radio.
- () 6. Arrangements completed for band.
- () 7. Arrangements completed for half-time entertainment (if any).

C. *Equipment*

- () 1. Laundry and dry cleaning sent out (Monday).
- () 2. Laundry and dry cleaning returned.
- () 3. Game uniforms ready.
- () 4. Game balls (2) ready.
- () 5. Officials' accessories ready. () gun and blanks; () three whistles; () two watches; () yard markers; () down markers; () chain for linesman; () scorebook.
- () 6. Medical supplies and stretcher ready.

D. *Facilities*

- () 1. Facilities inspected: () game field; () goal posts; () bleachers; () fences and gates; () scoreboard; () ticket booths; () press box; () canvas fence covers; () toilets; () concession booths; () dressing rooms; () water fountains; () benches.
- () 2. Facilities cleaned and repaired.
- () 3. Field lined day prior to game.
- () 4. Decorations arranged.
- () 5. Bleachers erected (if necessary).

E. *Administration*

- () 1. Write visiting team to determine time of arrival and requirements.
- () 2. Make arrangements to accommodate visiting team.
- () 3. Get tickets and forms ready for ticket sellers.
- () 4. Place tickets on sale (Monday) at appropriate places.
- () 5. Request cash needs for ticket sellers, concessions, and program sellers.
- () 6. Make arrangements for meals for home team.

II. DAY OF GAME

A. *Personnel*

- () 1. Pick up change and tickets and meet ticket sellers.
- () 2. Distribute change to program sellers and concession sellers.
- () 3. Meet and assign duties to other student help.
- () 4. Check with physician.
- () 5. Meet and assign duties to police.

B. Publicity

- () 1. Public address equipment set up.
- () 2. Public address announcer information ready.
- () 3. Spotter for press box.
- () 4. Programs and starting line-ups for press available.
- () 5. Refreshments for press representatives (at half).
- () 6. Check half-time entertainment (if any).

C. Equipment

- () 1. Game uniforms issued.
- () 2. Towels and soap provided for visiting team.
- () 3. First-aid kit prepared.
- () 4. Sideline coats, blankets, etc., available.
- () 5. Officials' accessories available: () gun and blanks; () 3 whistles; () 2 watches; () scorebook; () yard markers; () down marker; () chain for linesman.

D. Facilities

- () 1. Check to see that scoreboard and time are functioning properly.
- () 2. Check public address system.
- () 3. Check facilities: () toilets; () drinking fountains; () entrances and exits; () bleachers; () press box; () benches; () visiting team's dressing quarters; () officials' dressing quarters; () condition of the field.
- () 4. Keys issued to () home managers; () visiting managers; () manager for officials.

E. Administration

- () 1. Make out checks for () visiting teams; () officials; () police; () student help.
- () 2. Check in receipts from () ticket sellers; () concessions; () program sellers.
- () 3. Deposit funds.
- () 4. Check on weather early on day of game and make any adjustments which are indicated.

PROBLEMS OF INTERSCHOOL ATHLETICS

The Serious Athletic Problems. There are numerous problems facing interschool athletics. The most serious of these are emphasis on false values, bad athletic practices, championships and tournaments, player control, proselyting and subsidization, junior high school athletics, interschool athletics for girls and women, the

academic teacher versus the physical educator as coach, and over-emphasis. Each will be discussed in turn.

Emphasis on false values. After an exhaustive study, the Education Policies Commission has indicated that the emphasis upon false values is one of the major problems which mar interscholastic athletics in American schools today. Its statement on this issue is as follows:¹⁰

When a high school student body attaches false values to the importance of interscholastic athletics, the entire school program is frequently disrupted. Under the guise of school spirit, waves of hysteria accompany frenzied preparation for an athletic contest. A conviction of the necessity for winning permeates the school, the community, the players, the coaches.

In such an atmosphere athletes are excessively revered and pampered. Members of the opposing team may be regarded as hated rivals and treated as invading enemies. Actions are encouraged that seek to injure, subdue, or humiliate an opponent. Game officials become targets for primitive, hysterical outbursts of derision, sometimes resulting in physical violence. Under these conditions, appreciation of the game is lost in the wildly partisan, unsportsmanlike manifestations of the crowd. After such a contest, victory elevates these partisans to high levels of ecstasy; defeat plunges them into the depths of frustration and despair.

Overemphasis on winning. Low standards of sportsmanship undermine a school's entire program of citizenship education. When interscholastic athletics place so much emphasis on victory that cheating, deceit, subterfuge, and unsportsmanlike acts are condoned, opportunities for citizenship training are sacrificed. Young people who are stimulated to believe that victory for the school team is more important than anything else are not learning to keep life values in perspective.

Glorifying star athletes. The star athlete on a successful team must be of strong character indeed to keep values in balance when he becomes the center of attention of school and community, flattered and publicized, and courted by scouts for college material. False values are distressingly evident when a boy who fails to make the team suffers despair or self-reproach, or when a player's game-losing mistake brings him the reproach of others.

Disparaging the nonathlete. In a teen-age society that has embraced athleticism as one of its supreme values, the boy who does not care very much about athletics loses status. Because of this and the attitude of some adults he may be pressured into taking part in distasteful and harmful physical activities. His lack of enthusiasm for the school team may provoke the taunts and derision of schoolmates. Desire to conform to an accepted pattern of behavior may lead to self-depreciation and inner conflict.

¹⁰ *Ibid.*, p. 6.

School games as public spectacles. It is bad enough for adult sports enthusiasts to demand that schoolboy games be staged for their benefit. It is worse when schools yield to this demand. False values are rampant when the notion prevails that school athletics exist primarily for public amusement. A school program of public relations based on athletics provides, in the long run, an ineffective and unstable basis for good school-community relations.

*Bad athletic practices.*¹⁷ Many bad athletic practices are defeating the purposes of interscholastic athletics. The more common of these are:

1. Overemphasis on the varsity. This practice leads to a disproportionate share of facilities, equipment, personnel, and funds being devoted to varsity teams. The inevitable result in most schools is that the students who most need athletics are deprived of the opportunity to engage in them.
2. Distortions in the educational program. Teachers are often under pressure to lower their standards for varsity athletes. In some schools they find it difficult to hold athletes to the same quality and quantity of work, attendance, and grading standards that they expect of other students.
3. Coaches under pressure. This is a familiar situation. In many communities the coach must win to hold his job. This pressure will inevitably cause some coaches to resort to vicious, unwholesome tactics in order to win games.
4. Financial woes. The failure of the school board to finance the interscholastic program adequately leads to a reliance upon gate receipts to keep the program functioning. When the athletic program must exist largely or entirely upon gate receipts, a variety of undesirable practices occur. The criterion becomes money rather than educational values. The result is overemphasis upon winning. Schedules are made with an eye to the income rather than the welfare of students. Individuals or groups in the community are solicited for financial assistance.
5. Farm teams. In order to obtain better material for high school teams a system of competition, beginning in the elementary grades, is carried on through the junior high school. The boys are prepared for the time when they are eligible for the high school team. No consideration is given to the welfare and desirable development of the boys. The program in some cities is analogous to the farm system of major league professional baseball teams.
6. Recruiting of players. Although recruiting on the high school level is not nearly so extensive as it is on the college level it still exists to such an extent that many state high school athletic associations have found it necessary to legislate against the practice. The most frequent offense is

¹⁷ The material in this section has been adapted from *ibid.*, pp. 7-10.

they might be defended; but when it is necessary to undergo this for three or four consecutive weekends, they become educationally indefensible. It is difficult to understand how the welfare of the boy can be given consideration when, in addition to the tournaments in connection with the state championship, invitational tournaments are also entered.

Player control. On October 20, 1927, the Central Committee of the New York State Public School Athletic Association passed the famous "Regulation One," which was modified to its present form on December 27, 1927. In substance, this regulation recommended that after the contest began, the two coaches should sit together and permit the respective captains to direct the teams. The coach might attend to the physical injuries of his team, and he could order the withdrawal of a player from the game; but that was the extent of his authority. When a player was withdrawn, he was unable to re-enter the game. His substitute was selected by the captain, who made substitutions as he chose. It was suggested that each coach send a representative to the other team's dressing room in order to prevent accusation of bad faith. The intention of the rule was to give every opportunity for the development of responsibility and resourcefulness on the part of the captain and of responsiveness to teammate control, true loyalty, and team play on the part of the players.

There immediately arose a storm of favorable and unfavorable criticism concerning this radical departure from the traditional method of conducting athletic contests. Those who endorsed this reform felt that it was in harmony with the best educational philosophy. Ability to solve problems is best attained by practice in problem solving; leadership is best attained by practicing it. The domination of the coach during the contests destroyed the richest educational values as far as leadership, responsibility, and resourcefulness were concerned. There were some who believed that the pressure on the coach to win would be reduced with the boys themselves in control of the games. There is no doubt that the standard of performance would be lowered, but both teams would be equally affected.

The opposition to this proposal was very strong, particularly among the coaches. The opponents of the reform felt that it was idealistic but impractical. They pointed to the early history of interschool

sports when the faculty was forced to regulate these activities because of student mismanagement. Why abolish the coaches who have raised the standards of athletics from their poor position before the advent of the twentieth century? The coach today is far better qualified to conduct athletics on a high plane than the coaches of the past have been. Another argument used against player control was that many schools, particularly the small high schools, have no leaders who are qualified to handle this difficult assignment. Even with the coach on the bench, it is frequently difficult for the captain or team leader to control the team. The "Mexican generals" on athletic teams present a serious problem to many coaches. Athletic contests are filled with intense emotional situations, and the responsibility upon the captain in control would be tremendous. His mistakes would be magnified by his teammates, and hard feelings would be sure to result. He would be accused of playing his friends, whether or not he did. It is doubtful whether the captain could be entrusted with the physical welfare of his teammates, although the coach or a physician on the bench could manage this.

The sentiment in favor of "Regulation One" has practically disappeared. Few, if any, schools adhere to the recommendations of this regulation today. In recent years the trend has been away from player control. The unlimited substitution rule in college and high school football and the rule in basketball which permits the coach to talk to his players during a time out are steps in the opposite direction. However, even though present regulations increase coach control, good coaches will continue to make every attempt to develop leadership and resourcefulness in their athletes. There never was a good team without a good leader. By developing better leaders and thinkers, the good coach knows he is building a better team. He is unable to dominate every situation which occurs during the game, and the better he has developed initiative and leadership, the better will these situations be met. Furthermore, the interval between halves presents the coach with the most favorable educational opportunity he will ever have to inculcate the valuable lessons which can arise out of athletic competition.

Proselyting and subsidization. This is the most serious problem which confronts intercollegiate athletics. Proselyting and subsidization do exist in high schools, but nowhere to the same extent as in colleges and universities. High schools are publicly supported, local

institutions, and the expense of attending them is very little. Furthermore, in many cities where there is more than one high school, the district in which the boy lives determines the school he must attend. The state high school athletic associations have vigorously combated proselyting and subsidizing by passing regulations against them. But this does not mean to imply these evils do not exist in secondary schools. Financial aid is sometimes given to boys who would not otherwise be able to attend high school. Considerations of various kinds are used occasionally to persuade parents to move to another community in order that their son might participate in athletics in a certain school. On the whole, however, this problem is minor in comparison to what it is in colleges and universities.

The effort to control proselyting and subsidizing of star athletes in institutions of higher learning has a long history. College administrators have opposed it for many years. College athletic conferences and associations have attempted unsuccessfully to halt the practices. The Carnegie Foundation investigation of college athletics, which culminated in its 1929 report (Bulletin No. 23), revealed a shocking disregard for the athletic codes and educational standards. However, despite this revelation the flagrant abuses have continued. If anything they were accentuated, particularly after World War II. The basketball gambling scandals, in which a considerable number of players in seven different institutions were tried and found guilty of consorting with gamblers; the West Point episode, in which a large number of athletes violated the traditional honor code; and the Pacific Coast Conference explosion in 1956, in which many athletes of four universities were involved in wholesale violations of conference regulations, made this postwar decade one of the blackest pages in the history of intercollegiate athletics.

The evidence is clear that intercollegiate athletics in many institutions are permeated with hypocrisy, dishonesty, and deceit. Agreements which institutions have pledged to honor have been deliberately broken. Lack of respect for rules may be traced to an attitude of studied evasion which amounts to a philosophy of the calculated risk. Institutional personnel, as well as alumni, have been involved in these sordid schemes against the regulations. The amazing feature about the matter is that colleges and universities are dedicated to truth, justice, honor, integrity, and other lofty virtues. Among the mottoes of American universities the word "truth" or its Latin

equivalent *veritas* appears more than any other. This inconsistency in what the school is aiming to achieve and what is actually happening in athletics must be eliminated.

Three groups of individuals are primarily involved in this problem. The first is comprised of the college and university administrators. In the last analysis, the president of the institution is responsible for what happens to it. If he has the power and is determined to have the athletic program in his school conducted in accord with the established regulations, it will be done. Many instances are available where this has been done. However, many presidents do not have the power, desire, or courage to cope with the situation. Alumni pressures, particularly, make it difficult for them to maintain desirable standards.

The coach is placed in an untenable position in many institutions. His uncertain tenure makes it imperative for him to win. The alumni constantly clamor for winning teams, and they are willing in many instances to supply the necessary financial assistance. The heavy financial obligations which many athletic departments have represent an additional pressure. In order to solve these problems good athletic material from high schools or junior colleges is a necessity. In this situation it is difficult for the coach not to succumb to the temptation of violating the regulations governing recruiting.

The alumni have proven the source of most of the difficulties in intercollegiate athletics. Their insistence upon winning teams has led to most of the evils which beset this program. They have been willing to spend much time and money to go after the prospects which the coaches have designated they want. Their activities have been almost impossible to control. They feel they are rendering a service to their alma mater and, at the same time, helping deserving students who could not otherwise afford to attend college. Perhaps the reason why they cannot see the wrong in violating athletic regulations is that little effort has ever been made to develop the proper attitudes among them.

Since the close of World War II the trend has been to liberalize the financial assistance given to athletes. A number of athletic conferences provide a full athletic scholarship—tuition, board, room, books, and a small amount for incidental expenses. This is justified on the basis that the athlete deserves this assistance because the time he would ordinarily use to earn his way is devoted to athletics.

Moreover, he is making a worthwhile contribution to his institution. These scholarships are administered through the college or university and are expected to cover basic subsistence. The athletes are not permitted to accept other financial grants or to work. Whether or not athletic scholarships will solve the problem remains to be seen.

After a survey of opinions from institutional presidents, coaches, and alumni, Hickman made the following recommendations to solve the aforementioned problems:¹⁸

1. Each prospective football player in order to obtain an athletic scholarship must be qualified for admission the same as any other student.

Some suggestions have been made that a national test should be given, such as the college board examinations, in order to standardize admissions. We feel that this is completely impracticable because of the varying degree of secondary school standards in different sections of the country and also the wide range of requirements for admissions at different institutions. Admission standards must be left to the individual institution, and in any case be no lower than the conference level.

2. The applicant must show economic need.

It should be the duty of each institution to check thoroughly the financial status of the athlete's family and their ability to pay his college expenses. In no case should he be given more aid than needed.

3. Each player should receive through regular institutional channels, and only through these channels, sufficient financial aid to take care of his normal college expenses such as board, room, tuition and fees, books, laundry and dry cleaning.

The individual college should make up a budget of necessary expenses of a regular student, and this criterion should be the amount of the athletic scholarship awarded. The amount in dollars and cents will vary from institution to institution and from conference to conference, but in any case it must not be above the actual expenses as certified by the college. If this procedure is followed it will do away with much of the bickering such as is going on in the Pacific Coast Conference about the difference in the cost of living in Los Angeles and Corvallis, Oregon.

4. All other financial aid, except that outlined in No. 3, is prohibited.

The prohibition includes promise of financial aid beyond the minimum time required for a student to complete his allowable athletic competition, and outside aid and outside jobs, except jobs during the summer and during the school vacations, for which the pay is not greater than that received by other people doing the same kind of work. Any outside rewards or inducements to athletes or prospective athletes, such as gifts

¹⁸ Herman Hickman, "Nine Points for Survival," *Sports Illustrated* (August 13, 1956), p. 61 Copyright © 1957, Time, Inc.

of money, clothes, lavish entertainment, loans or acting as sureties for loans, shall be considered as excessive financial aid and be prohibited.

5. The acceptance of any aid, except that outlined in No. 3, shall result in immediate expulsion of the student involved.

Assuming a conference and all of its members, or, so far as that goes, all the conferences and colleges, have adopted this scholarship plan, then there is no reason why this rule should be broken. When an institution guarantees the needed expenses of an individual, there are certain responsibilities that he must assume. This should be explained to him in full by a regular faculty representative the day he registers. He should be asked to sign a pledge to this effect in order to receive his scholarship.

6. A fixed percentage of athletic scholarships—we suggest 75%—should be reserved only for boys in the conference territory of the college or university and its environs.

This would avoid the widespread recruiting abuses which occur in the course of competition for players from other sections. Another point that might be well taken would be to put a limit on the number of athletic scholarships each institution could provide so as to keep the competition on the same plane within a conference.

7. To receive an athletic scholarship and remain eligible for it, the recipient must take a regular course of study, of his own choice, leading to a degree. He must take a normal load of academic hours and maintain a satisfactory average. Before the beginning of his third year he must have attained the proper number of credit hours and quality points to become a full-fledged member of the junior class or his scholarship will be withdrawn.

If this rule was adopted and maintained by all institutions, most of the critics of college football would be hushed. Phony jobs and under-the-table pay are relatively unimportant compared to this phase. The maintenance of these standards does away with the stigma of "hired" athletes. The word "amateur" becomes real. In other words, strict observance of this rule places the proper connotation on the noun "proselyte."

8. The responsibility for proper practices of recruitment and subsidization of players should be placed squarely on the shoulders of the head football coach.

The president of the institution and his faculty committee on athletics should demand that the coach be personally and directly responsible to the president and his committee for his actions. They should insure and assure him against undue pressure to win games at any cost. They should free him of financial worries about gate receipts, and they should fire him if he or any of his assistants directly or indirectly give, have given, promise, or condone any financial aid to players or prospective players beyond the regulations of the institution.

9. The "athletic dormitory" and the year-round training table should be abolished.

We realize that the training table during the season, especially for the night meal after practice and the pre-game meals on Saturdays, is a must. But for better player-student relations the athletic dormitory should be done away with or divided with nonathletic students, and the training table abolished out of season. And, more important, all incoming freshman athletes should be mixed at the beginning with other members of the student body. This might be impracticable at some institutions and economically unsound at others, but it would improve the stature of college football immeasurably.

Junior high school athletics. The subject of interscholastic athletics on the junior high school level has been a red-hot issue among physical educators for the past twenty-five years. The American Association for Health, Physical Education, and Recreation,¹⁹ the American Association of School Administrators,²⁰ the American Medical Association,²¹ the Educational Policies Commission,²² and the Joint Committee (composed of representatives of the American Association for Health, Physical Education, and Recreation, the Society of State Directors, Department of Elementary School Principals, and the National Council of State Consultants in Elementary Education)²³ have all come out in opposition to such competition. Despite the condemnation of all these national organizations, junior high school athletics have continued to flourish.

The arguments against junior high school interscholastic athletics have been summarized by Mitchell as follows:²⁴

1. *Physiological.* Boys in the junior high school period are in the stage of very rapid growth. Growth is work. Consequently, boys of these ages should not be subjected to additional strenuous activities which are of long duration. In informal competition the boy alternates short periods of exertion and rest. But when he competes as a member of a school team, he will have to continue beyond the natural limits of his endurance. This is considered harmful.

2. *Psychological.* The junior high school boy is not ready emotionally for the mental strain, tension, and excitement engendered by the varsity-type competition. Participation in informal or intramural athletics does not develop the high pressures which competition before adult audiences does. The boy ought to be prepared gradually for the type of athletic program he will experience in the senior high school.

3. *Sociological.* Junior high school boys are too young to be regimented in the manner of high school and college athletes. They are at an age when they need to develop self-reliance, independence, and to make their own choices. It is contrary to normal growth patterns to subject his every decision, his every move to the dictation of adult-imposed orders.

4. *Economic.* Interschool athletics are expensive. The cost of equipment, facilities, coaching staff, medical care, travel, and other items is exceedingly heavy. Gate receipts in junior high schools cannot be counted upon to absorb a large part of the expense. Reliance upon school funds is necessary. This leads to the temptation to try to carry on the program with cheap equipment and inadequate facilities. The hazards of conducting football on such a basis are obvious. In addition, the available resources are concentrated upon a small number of students to the detriment of the remainder.

5. *Educational.* The junior high school period is one in which the students should explore a wide variety of interests. Specialization should come in the senior high school or later. It is too early for boys to concentrate on one or two sports and to miss the opportunity to try out many different activities.

The opponents of junior high school athletics claim that the main motivation for such teams is to prepare material for high school teams. This is an adult exploitation of the interests of boys and produces unfortunate results. At the same time such a program does not produce a wealth of varsity material to the same extent as a comprehensive intramural program. The limitation of squads will automatically eliminate boys who would later develop into varsity players. The phenomenon of puberty produces many amazing results, and the small, unimpressive boy in the seventh grade may be an outstanding athletic prospect in the senior high school. If strong varsity teams are desired for the senior high schools, the best way to attain them is to provide a comprehensive intramural program in the junior high schools.

Some support of the physiological argument against junior high school athletics comes from Lowman. He writes:¹⁵

¹⁵ C. L. Lowman, "A Consideration of Teen Age Athletics," *Journal of Health-Physical Education-Recreation* (September, 1941), p. 398.

Dr. Mark Jansen of Leiden, Holland, years ago pointed out that fast-growing cells and tissues are most vulnerable, i.e., most liable to damage or injury. Skeletal structures, as well as organs, are in a stage of rapid growth just preceding and during adolescence. Accordingly the potentials of injury are greater at this age.

Wilton Krogman, the noted anthropologist bases his opposition to junior high school interscholastic athletics on the ground that children have only so much energy and when they are using it for growth, heavy additional demands should not be placed upon them. He states:²⁴

As a human biologist I hold it basically unsound to impose upon the rapidly growing organism excessive physical demands. The catch here is, of course, the definition of the word "excessive." In a sense the definition must refer to the skills, aptitude, and potential of the individual; this means a demand-evaluation based on the child's own growth progress. In a larger sense, however, this means that the entire circum-pubertal period, roughly 11-14 in girls, 12-15 in boys, is one in which maximum protection must be given to the growing child, for balance between energy-intake and energy-use (in function and in growth dynamics) is finely drawn—there is too often no reservoir of excess energy upon which to draw. By "protection" I mean that the child in such a growth surge should not be required to lavish energy upon various kinds and degrees of athletic performance.

I should like to point out that I am not in the least condemning. I am admonishing. I am certain that Physical Education as a discipline, will implement growth thinking into any and all programs of athletic skills, be they merely curricular (as gym classes) or competitive (as intramural or interschool). My thinking applies mostly to the latter, and especially to the vigorously aggressive contact sports. There is no profit it seems to me, in risking traumata—either morphological or physiological—at a time when the child, (especially the boy) is depositing all his energy in the bank of growth. It will yield him a high rate of interest in normal, healthy progress toward maturity. Why, then endanger the yield by a too-great withdrawal from the energy account?

Another valid argument against junior high school varsity athletics is that in regard to the adequacy of the resources for both intramural and interschool athletics. An interscholastic program should not be attempted unless it can be done without interfering with the instructional and intramural activities. The needs of the great majority of

students must be met before a varsity program is initiated. This stipulation would eliminate the interscholastic program in most junior high schools because the facilities, equipment, and personnel are not adequate for *both* programs.

The proponents of junior high school athletics argue that many of the criticisms of this program are unfounded. They point out that practices are shorter, fewer games are played, and the length of games is reduced to bring the competition within the capacities of the players. Research data are not available to demonstrate the physiological and psychological harm of such competition. Thousands upon thousands of junior high school boys have participated in interschool sports with no apparent ill effects. Walker found an injury incidence of 5 per cent in junior high school football in Texas as compared to a 10 per cent incidence in senior high school football.²⁷

Insofar as the educational argument that the junior high school period is too early to specialize in one sport is concerned, supporters of the program point out that students have the opportunity to become acquainted with a variety of activities in the physical educational service program. They also contend that only a small number of players participate in the varsity program in more than one sport.

To justify the varsity program in junior high schools the point is also made that unless the school provides a program for the superior performers that various agencies within the community will do so. Ordinarily, these agencies will not conduct the program on as high a level as the school will. It is a matter of fact that many boys participate on several different teams during the same season. The possibility of deleterious consequences of this type of competition are decidedly greater than that involved with school teams.

The authors believe that all evidence favors the development of strong intramural programs on the junior high school level. If varsity teams are supported, they should be carried on in accordance with the various recommended policies. The playing rules and court dimensions should be modified to suit the capacities of the players. Shorter seasons, short practice periods, and reduced schedules are essential. Tournament play should be prohibited. Long trips should

²⁷ Malcolm Walker, "Interscholastic Football in Junior Highs," *Athletic Journal* (February, 1951), p. 24.

not be permitted. Good equipment, proper facilities, adequate medical care, and, most important of all, professionally trained leadership should be available.

Interschool athletics for girls and women. The question of interschool athletics for high school and college girls and women has been a very controversial one. Up until comparatively recently most women physical educators and the women's professional organizations were united in their opposition to such competition. Today, this opposition to such competition has moderated considerably, although women leaders still prefer intramural competition, play days, sports days, and telegraphic meets for girls.

Various reasons were advanced against extramural competition for girls. It was thought that strenuous athletic participation would affect adversely the reproductive function of women. Concern was expressed that the delicate female sexual organs might be damaged or displaced by violent exercise. In addition, it was felt that the narrow hips which are characteristic of many women athletes created special problems in childbirth.

This objection to vigorous exercise is rarely heard today. No scientific evidence has been produced to substantiate these claims. On the other hand, Jokl has presented evidence which completely refutes the claims that athletic competition has an adverse effect upon the reproductive organs of women. He has summarized two recent studies which reveal that insofar as major disorder during pregnancy, duration of labor, incidence of Caesarian section, and the use of outlet forceps, and fertility ratios are concerned, there is no appreciable difference between athletes and nonathletes. In fact, if any advantage was gained, it was by the women athletes.²²

Another argument which has been advanced against interschool athletics for women is that girls would be handicapped during their menses. Jokl describes a study, done in 1930, on the effect of menstruation upon the performance of champion women track and field athletes.²³ The data revealed that participation during menstruation had no effect upon 63 per cent of the performers, resulted in an improved performance in 29 per cent of the performers, and produced a decrease in only 8 per cent of the performers. Jokl also

²² Ernest Jokl, "Some Clinical Data on Women's Athletics," *Journal of the Association for Physical and Mental Rehabilitation* (March-April, 1956), p. 48.

²³ *Ibid.*, p. 48.

reported a similar investigation by Ingman in the 1952 Olympic Games in Finland. One hundred seven female champions, consisting of 9 swimmers, 13 gymnasts, 28 basketball and baseball players, 14 skiers and skaters, and 43 track and field athletes, from fifteen to thirty-five years of age, were involved in this study. All but four had participated in their sports during menstruation without experiencing any difficulty whatsoever. Of this group, 20 reported better than normal performances during menstruation; 45 felt no effect of menstruation upon performance, and 39 experienced poorer than normal results.

The statement of Hillebrandt and Meyer also bears upon this same point:²⁰

Indirect evidence such as we now have is in favor of the continuous exercise as a sane regime for the normal female during menses. This policy, put into effect in England by the Council of Medical Officers of Schools Association, has met with approval. It has been associated with a marked reduction in the incidence of dysmenorrhea. Not only does it seem physiologically normal to continue exercise during menstruation but large scale experience with this policy as a mode of conduct for adolescent and young adult women has demonstrated it an intelligent prophylactic.

Another argument presented against interschool athletics for women was that it was unladylike, that it hardened the woman and made her aggressive and masculine. Today, however, the ideal girl is strong, healthy, and vigorous, but not without the desirable feminine characteristics. To consider athletic participation and femininity as incompatible is a mistake. Furthermore, as was pointed out earlier, women have a great need for training and practice in those desirable social qualities, such as co-operation, sportsmanship, loyalty, and emotional control, in which, it has been charged, they have been deficient in the past. No man or woman is born a poor sport, disloyal or unco-operative. Women, given the same opportunities to practice and develop them, will have desirable social traits in the same degree as men. Woman, from time immemorial, has spent her life chiefly in the home, where she had no particular need or opportunity to develop these qualities under conditions of competition.

²⁰ Frances Hillebrandt, and Margaret Meyer, "Physical Data Significant to Participation by Women in Physical Activities," *Research Quarterly* (March, 1939) p. 20.

Woman has greater freedom today, however, than ever before. More and more, she is participating in the social, political, and economic life of the world. If she is to fit harmoniously into this different life, she needs a different training. A valuable part of this training will be gained through competitive sports.

Scott's observation regarding the effects of interschool athletic competition upon women are pertinent:³¹

If they are harmed in any way by their experience in these competitions, little evidence of that fact has been revealed. To those girls who object to participation in games and sports in the belief that such activity will produce bulging, unsightly muscles, and coarsened features, the answer to their fears can be found in part by attendance at the moving picture theatre or various other places of amusement and entertainment where former sports champions appear in the role of glamorous performers in the theatre arts. It should, of course, be the ambition of every department of physical education to preserve and add to the desirable feminine qualities of girls and women. There is little evidence, however, that properly conducted athletic competition coarsens or renders women less attractive than they were when they chose to engage in competitive sports. It may be said, however, that a healthful vital appearance, skillful bodily movement, and a degree of poise in group relations, all of which may be gained through properly conducted competitive sports, are definite assets to the American ideal of womanhood.

A more valid argument against interschool competition for girls is that women leaders wished to avoid the undesirable practices which had been associated with interscholastic and intercollegiate athletics for boys. It is entirely logical that the women do not want overemphasis upon winning, overspecialization, undue publicity, public pressures, interference with classes, exploitation, and the like. They have been particularly concerned about the conflict of interschool athletics with the service and the intramural programs. They are determined—and properly so—that the needs of the majority will not be sacrificed to have a representative team. They recognize that few institutions have the facilities, equipment, and teachers to have *both* adequate intramural and interschool athletic programs.

The majority of women physical educators will continue to oppose interschool schedules for girls unless two conditions are satisfied. The first of these concerns the conflict between varsity and intramural—and, at times, the instructional—programs. They will never

sacrifice the welfare of the majority of girls to have interschool athletics. The priority must be given to intramural activities. If sufficient resources are available for varsity teams without any substantial interference with intramural athletics, a major objection will be removed.

The second condition is related to the conduct of interschool competition. An interschool athletic program should be planned, directed, and supervised by women themselves. Gate receipts, championships, and publicity for individual players should be eliminated. Financial support should be provided from regular school funds. Women instructors of physical education should sponsor the teams, and competent women officials should officiate the games. A physical examination by a qualified physician is a necessity every year. Interschool athletics for girls should be an outgrowth of the intramural program and should be limited to several contests with neighbouring institutions. The rules followed should be those in the official guides of the National Section for Girls' and Women's Sports. Social events in connection with the competition are recommended. It is not desirable to schedule girls' games with those of boys.

If interschool competition for girls could be conducted under the circumstances indicated above, the opposition of women physical educators would be materially reduced. The women recognize that it is a sound educational principle to make special provisions for the superior students. This is done in many other school activities, and the trend is definitely in the direction of providing special curricula, courses, and programs for those who are gifted. The following statement from the standards for athletics for girls and women developed by the National Section for Girls' and Women's Sports (this organization for girls and women is analogous to the National Federation for State High School Athletic Associations and the National Collegiate Athletic Association for boys and men) pertains to this point:²¹

There is nothing in the creed of education which rules out the expert. There is no defensible reason why an educationally designed athletic program should either fear or fail to develop the maximum skill which an individual may possess. A well-conducted program of athletics will provide for the whole range of skill. This will be true not only in the matter

²¹ Committee on Standards of the National Section for Girls' and Women's Sports, "Standards in Athletics for Girls and Women."

of leadership and coaching provided but in the provision at every level of skill for competition between equals.

Women leaders are also cognizant of the fact that if they do not arrange interesting and challenging competition for the outstanding girls, other groups and agencies in the community will do so. Needless to say, such competition often leaves much to be desired insofar as the welfare of the girls is concerned.

Leyhe investigated the opinions of over 800 women members of the American Association for Health, Physical Education, and Recreation concerning competitive athletics for girls and women.³³ She found that the great majority was opposed to national, state, district, and country tournaments for girls and women. However, in regard to conducting a schedule of varsity competition for girls under sound leadership and high standards a bare majority was opposed. The women were quite generally favorable to interschool competition in individual sports. The women who themselves had competed in interschool sports were much more favorable to such competition than were those who had not competed. The number of women opposed to intercollegiate competition was not so great as the number opposed to interscholastic competition.

Leyhe's data bear out that women physical educators have appreciably modified their opposition to interschool competition for girls in the past quarter century. However, the majority is not prepared to endorse such an athletic program until it can be conducted toward the best interest of all the girls. Since few schools have or will have in the near future the resources to conduct *both* an intramural and an interschool program it will undoubtedly be many years before the present pattern is appreciably altered.

Play days and sport days. Play days and sports days are women's unique contributions to physical education. They represent the type of athletic competition which women developed as a substitute for intercollegiate and interscholastic sports. The women wished to avoid the abuses and defects which have characterized men's interschool competition. The play-day movement originated as an outgrowth of the meeting in 1923 of the National Amateur Athletic

Federation when a group of women drew up their resolutions for women. The triangular play day for Mills College, Stanford University, and the University of California attracted considerable interest and led the way for subsequent play days, not only in colleges but in high schools as well.

A play day is defined as a day when girls from several schools or colleges meet and play with, rather than against, each other. They come together at the invitation of one of the institutions. The girls are divided into teams, each team representing no one school but a combination of all. In this way, there is an approximately equal number from each school on each team. Teams adopted the names of colors and are known throughout the day as blues, green, whites, and the like. The emphasis is on "sport for sport's sake" and "play with us and not against us." The customary number of activities is from five to seven, though more or fewer may be used. Experience has shown, however, that too many activities on the program are undesirable. Equally undesirable are long trips and widely diversified age groupings of the participants. Many schools have only one play day a year, but two or three appear to be the usual number.

A variation of the play day is the sports day. In this type of competition, several schools meet for the day; but the teams remain intact, and the players are not interchanged as in the play day. One or more sports may be included in the program. There is usually more than one team representing each organization participating in this form of competition. In both the play day and sports day, the activities are usually those in which the girls have been instructed in their physical education classes. A play day or sports day is not an occasion to teach new games, although it might be a good place to demonstrate a new one. Schools might be invited to bring their intramural championship team in a particular sport.

The advantages of play days and sports days are obvious. They offer particularly fine opportunities for social contacts. A large number of girls can engage in a wide variety of recreational activities. Excellent opportunities for leadership prevail. They successfully avoid the defects of interscholastic and intercollegiate athletics.

As a substitute for interschool competition, play days and sports days will be found lacking in several respects. It is difficult to see how one or two play days a year will accomplish much as far as

competition with other institutions is concerned. More fundamental, however, is the fact that the needs of the highly skilled girls are not satisfied. They want to compete against other good players. They deserve this opportunity if it can be arranged without detriment to the girls or other aspects of the program.

The academic teacher vs. the physical educator as coach. The question of whether it is better to have an academic teacher rather than the physical educator do the coaching of varsity teams has been extensively debated. It is argued that if the physical educator teaches his classes as he should, he is likely to come to varsity practices devoid of the energy and enthusiasm he should have. A much more serious disadvantage is the neglect on the part of physical educators of their duties in the instructional program. Because of the pressure to win and the inordinate demand upon their time, many physical educators who serve as coaches either stop teaching and become "ball tossers" in order to devote more time to preparation for their practices, or they exploit their students to seek out and develop material for their varsity squads. There is little doubt that instructional and intramural programs would be conducted on a much higher level if physical education instructors were relieved of their coaching responsibilities. The excellent programs conducted by women physical educators provides ample evidence of this fact.

On the other hand, the major advantage of the physical education teacher as a coach is that he is specifically prepared for this responsibility. There are three separate aspects of this preparation: (1) with his background of the philosophy and principles of physical education he can better appreciate the place and purposes of athletics in the total school program; (2) he will possess the physiological, anatomical, and health background necessary to protect and safeguard the health and welfare of the participants; and (3) he has a much broader and more diversified preparation for the actual coaching. Also, the closer acquaintance of the physical educator with all the boys in the school is a distinct advantage. Having these boys in his physical education classes gives him the opportunity to assess their athletic potentialities.

wholesome diversion which will not interfere with his teaching responsibilities because, ordinarily, academic teachers coach only one sports. The informal relationship with the students helps the academic teacher understand them better and gives him a prestige he could not otherwise obtain. It is highly beneficial to the morale of the school as a whole to have a number of academic men interested in and co-operating with the boys in athletics.

The only serious disadvantage of academic teachers as coaches is that ordinarily they do not have special preparation for this assignment. To play on a varsity team in college does not constitute adequate preparation for coaching. If the school administrator were fortunate to have some academic teachers with major or minor preparation in physical education, this disadvantage would not pertain.

Several considerations are involved in providing a solution to this problem. In the first place, most administrators must use a combination of physical education and academic teachers to meet the requirement of coaches. Considering the number of sports in which competition is conducted, the necessity of having second, or junior, varsity and perhaps even freshman teams, and the desirability of having more than one coach per team in certain sports, the school administrator is hard put to provide the necessary leadership. He has no other recourse but to use academic teachers.

The school administrator can go a long way in solving the problem by employing men as academic teachers who are adequately prepared to coach. He might be in a position to insist that these staff members obtain additional training in summer sessions. When academic teachers lack a suitable background they can be used advantageously as assistant coaches or as coaches of the milder, "nonpressure" sports. The school administrator must accept his responsibility of insisting that physical educators who do coach meet all their obligations insofar as the instructional and intramural programs are concerned. Finally, the entire athletic program should be directed by an individual with a good physical education background. His supervision will do much to reduce or prevent mistakes by untrained academic teachers.

Reducing overemphasis. Overemphasis in interschool competition is commonly seen in the heavy schedules and the overly long seasons

of some teams. To reduce such overemphasis, many state athletic associations restrict both the number of games which can be scheduled in a sport and the length of the sports season. Twenty-seven state high school associations limit the number of football games, and 35 limit the number of basketball games in which member schools may engage. Restrictions are ordinarily placed only upon football and basketball schedules. Twenty basketball and nine or ten football games represent the average number of games permitted. Thirty-three states set definite dates for the beginning and end of the various sports seasons. Because of the varying climatic conditions, the dates of beginning and ending of the sports seasons will differ. In most states, the football season begins on the first day of September and terminates on the Saturday after Thanksgiving. The basketball season commonly extends from the first day of December to the last day of the state basketball tournament.

Thirty-two state athletic associations prohibit spring football practice. Some collegiate conferences have banned or reduced spring football. Thirty-eight state associations have eliminated all-star games. All national championship competition on the secondary school level has been prohibited.

Desirable Trends in Athletics. There are definite trends in intercollegiate and interscholastic athletics. Athletics, as they are conducted today, are far more acceptable educationally than they were thirty years ago. The direction in which they seem to be traveling augurs well for interschool athletics of the future. More and more of the objectionable features are being eliminated, and it is safe to predict that, in the not-too-distant future, athletics will be conducted to the satisfaction of educators and to the permanent enrichment of the educational program. Some of the trends toward more educationally significant goals are pointed out below.

Increasing power of athletic associations and conferences. The state associations are gradually expanding their powers and assuming more and more control of interscholastic athletics within their jurisdiction. Their original concern was eligibility, but now their functions have broadened to include athletic insurance, officials, awards, athletic equipment, the conduct of meets and tournaments, the classification of schools, and the development of high school standards for high school boys. This expansion of the powers and functions of the state associations is undoubtedly a step in the right

direction. There can be no more effective agency in the state for raising the plane of interscholastic athletics to the high level upon which it should be conducted. College and high school athletic conferences may also become powerful forces for improving the standards of interschool athletics. Progress can be made only through the medium of well-organized groups.

Classifying schools and players. There seems to be a distinct trend toward classifying schools and players. Instead of having one state championship, some states are conducting tournaments for two or three types of schools, depending upon their size. In Wisconsin, Class A schools are those with an enrollment of 500 or more, Class B from 160 to 500, and Class C under 160 pupils. This is a much more equitable method of conducting tournaments, and it has proved extremely popular. The small schools have an equal opportunity under this setup, and athletics have been stimulated in these schools. The practice of having "B" teams and lightweight teams is also an advancement over the single heavyweight team. Not only does this plan give more boys an opportunity to engage in interschool athletics, but the lighter boys, who would have no chance to make the heavyweight team, are able to obtain the benefits of competition. Educationally, the classification of schools and players is sound procedure.

Interschool athletics for all. There are many more boys today who are given the advantages of intercollegiate and interscholastic athletics than ever before. For years, football, baseball, basketball, and track were practically the only sports in which interschool competition was provided in most schools. In the decade of the thirties, there was a trend to schedule competition in many more sports. World War II has greatly accentuated this trend. Today, many high schools, colleges, and universities include in their interschool program the following sports: tennis, golf, swimming, cross country, wrestling, gymnastics and ice hockey. A small number compete in handball, squash, skiing, lacrosse, rowing, fencing, and water polo. The following list of state championships conducted in 1955 reveals how sports programs in high schools have expanded.²⁴

Visionary leaders in physical education prophesy interschool competition in badminton, bowling, volleyball, table tennis, speedball,

²⁴ National Federation of State High School Athletic Associations, *Handbook: 1954-55*, pp. 40-41.

<i>Sport</i>	<i>Number of states declaring championship</i>
Basketball	45
Track and Field	46
Tennis	31
Golf	34
Baseball	31
Football	18
Swimming	23
Wrestling	22
Cross-country	21
Gymnastics	5
Six Man Football	6
Boxing	2
Indoor track	5
Hockey	2
Soccer	3
Softball	1
Volleyball	3

softball, archery, and other activities which are prominent in physical education class work and intramural programs. The growth of six-man football has been a significant development because it enables many small high schools to add this sport to their programs. Many values have been proclaimed for athletics, and if these claims are true, as many students as possible should be provided with the opportunities to acquire them. The trend is unmistakably in this direction.

Limiting competition. Imposing a limit on the number of varsity sports in which a boy may participate has a number of advantages. It lessens the dangers of his injuring himself physically and burning himself out athletically. He has more time to devote to his studies and other aspects of school life. It gives him time to become acquainted with golf, tennis, handball, and other activities which he might use when his days of interschool competition are over. In addition, such a rule spreads out the opportunities for interschool athletics to a much larger number of boys.

Brammell found the following plans for limitation of pupil participation in interscholastic athletics in 296 schools:²⁵

²⁵ R. Brammell, "Intramural and Interscholastic Athletics," *National Survey of Secondary Education* (Washington, D. C., U. S. Office of Education, 1932), Bull. 17, p. 69.

<i>Plan of limitation</i>	<i>Number of schools</i>
One sport each year	3
Two sports each year	24
Three sports each year	45
One sport each semester	24
Two sports each semester	11
One sport at a time	14
No limitation	175

Such a regulation is highly desirable for larger schools, but it would undoubtedly inflict a hardship upon the small schools. Colleges rarely limit participation because players are older and are not so liable to overstrain. In addition, three- or four-sport athletes are much rarer in colleges than in high schools.

Reduction in school time lost. Much greater consideration is given today to the time lost from school by athletes. Long trips are things of the past for most high schools. Intersectional games were frequent a decade ago, but they are quite exceptional today in high schools. Forty-two state associations have adopted the policy of prohibiting postseason games of any nature. Schools are competing within their conferences and against local opponents. Emphasis on national championships has been eliminated, and there is considerable question as to the advisability of state championships. The trend in many high schools to refrain from playing contests on a day or night preceding a school day to avoid distraction from school work is another indication that athletics are being conducted more to the satisfaction of educators. Friday is the most popular day for interscholastic contests, but most colleges play on Saturday, although this practice is frequently reversed.

Extra pay for coaches. The practice of paying high school coaches an additional stipend for their coaching duties developed during World War II. Agitation for extra pay arose during the war when many other teachers were able to supplement their incomes by various types of employment in the afternoons after their school duties were over. Coaches felt they were entitled to additional remuneration because in most cases the time devoted to their coaching duties was over and above a full teaching load.

A survey by the National Education Association showed that coaches received additional amounts above their regular salaries in

157 of 197 cities.²² This policy was adopted first in the larger cities. However, the practice has since spread to other cities and to smaller communities. The great majority of interscholastic coaches are now recipients of extra pay for their coaching duties.

A few cities still do not favor extra pay for coaches. Instead, their teaching loads are adjusted during the period they are coaching. This action is predicated on the conviction that overloaded teachers will inevitably neglect some of their other duties. All too often the service program in physical education has paid the price of overloaded coaches. Between the two extremes are some communities which grant extra pay for coaching in one sport. By this limitation they avoid overloading coaches during the entire academic year.

Increase in benefit and protection plans. State high school athletic associations have continued to improve their programs to take care of athletes who become injured in athletic competition. These plans have been so successful that they are gradually expanding in a number of ways. Not only are they providing more and better coverage to varsity athletes but they are now embracing students injured in the service and intramural programs.

Wider distribution of honors. The tendency for teams to elect captains and for the coach to appoint captains for different games is in contrast to the practice in the past. This is a healthy sign that the opportunities for leadership are being distributed more liberally than heretofore. Another indication of the same tendency is the large number of awards which are granted to all teams. Substitutions are made much more frequently than they have been in the past. With "B" and lightweight teams, with limitation of participation, with more frequent substitution, and with a wider variety of sports, the ideal of "athletics for all" may more nearly approach "interschool athletics for all."

Better prepared leadership. The practice of permitting persons who do not have faculty status to coach high school athletic teams has proven generally unsatisfactory. Such individuals have little understanding or appreciation of the purposes of the school and are unable to relate their efforts toward educational goals. It is encouraging, therefore, that 40 states now require all coaches of athletic teams to be certified members of the faculty. Such a standard will decidedly

²² National Education Association, "Coach-Pay over the Nation," *Scholastic Coach* (February, 1947), p. 22.

improve the quality of leadership of interscholastic athletics.

Summer competition. One of the most recent innovations in interscholastic athletics is the continuation of athletic competition through the summer months. Minnesota and Iowa have pioneered in this new development. In these states several hundred schools compete in baseball, swimming, tennis, and golf. Competition is first carried on within districts. The district winners compete for the state championship. Ten states now carry on summer baseball programs.

Competition throughout the summer is carried on in the same manner as it is during the school year, except that the students do not attend classes. The standard rules of the state athletic association govern all contests, and the coaches are regular members of the faculty. In many communities one or more of the regular coaches are retained on a twelve-month basis to supervise the summer activities. All students who were eligible during the second semester are eligible for summer competition. Practices are held in the late afternoons or evenings.

This new development appears to have great possibilities. In most states the sports program in the spring is always handicapped by inclement weather. The summer months are ideal for carrying on competition in such sports as baseball, swimming, tennis, and golf. Because many communities have outdoor pools, the number of schools which can compete in interscholastic swimming during the summer months far exceeds the number which can do so during the school year. Because of longer schedules and better facilities, summer interscholastic competition reaches more students over a longer period of time. In addition, these sports are splendid recreational activities at this time of the year. It is vitally important that as many students as possible be brought into the summer athletic program.

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Intramural Athletics

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Development of Intramural Athletics. Translated literally, intramural means "within the walls." Intramural athletics, therefore, may be defined as athletic activities carried on within the walls of an institution. Intramural athletics appeared in the schools long before anyone even thought of physical education and interschool athletics. The desire to play is universal, and some form of it has always existed. It seems inconceivable that this powerful urge could have been entirely suppressed in our first educational institutions. The beginnings of intramural athletics can undoubtedly be traced, then, to the informal sports and games which were indulged in by our first students in their leisure moments. This type of play, within the walls of the institution, may properly be considered intramural athletics, although it does not exactly resemble our intramural athletics of today.

There is ample evidence that boys participated in various sports in our early American schools despite the obstacles in the form of hostile teachers and the Puritan philosophy of the sinfulness and foolishness of play. As educational institutions multiplied and the school population increased, informal play activities among students expanded. The haphazard nature of these activities gradually gave way to better organization. Competition was organized between societies, fraternities, dormitories, and classes. The students conducted their activities by themselves. The faculty was indifferent. In 1859, the Yale undergraduate body was divided into twelve intramural boating clubs of twenty men each. These contests continued for nine years before giving way to a system of interclass crews. Baseball was organized as an intramural sport at Princeton in 1864.

Field days for track and field sports were conducted on an intramural basis at Yale and Princeton about this time.

As the intramural program developed, students looked beyond the confines of their own institutions for competition. It is an interesting fact that interschool athletics arose from intramural sports. But the development of interschool athletics had no deleterious effect on intramurals. The students continued to play among themselves with no faculty guidance or interference. The fact that these activities continued with unabated interest in the face of the bitter interschool rivalries is ample testimony to the vitality of intramural athletics. Those students who were not good enough to represent their school against other schools expressed their natural desire for play and competition against their fellow students. Intramural athletics, discovered by students and promoted by students, continued to expand and develop.

About the beginning of the twentieth century, some progressive physical educators began to take an interest in these intramural programs. They saw in these activities unusual opportunities to broaden the scope of physical education. From 1907 to 1912 it became increasingly apparent that some authorized individual was needed to control and regulate these expanding activities. The athletic associations at Michigan and Ohio State made provision for departments of intramural athletics in 1913. Other schools soon followed their example. World War I gave a tremendous impetus to intramural sports. Athletic departments were always favorably disposed, because they saw in intramural athletics a training ground for varsity material. In high schools the movement to adopt intramural departments came into full swing in 1925. A steady growth of intramural athletics continued in colleges and universities up to World War II. The development was considerably slower in the secondary schools. Because so many college men were drawn into the armed services, the intramural programs were greatly curtailed during the war.

As the previous war had done, World War II exerted a profound effect upon intramural programs. The war had clearly demonstrated the values of sports, and a general conviction prevailed that intramurals must be made available to all who were unable to make the institutional teams. A determined effort was made to provide more intramural services to more students. Programs were expanded,

chiefly by including additional activities. While the ideal "athletics for all" was not attained in most institutions, it was more nearly approximated than ever before.

The Relationship of Intramural Athletics to Required Physical Education and Interschool Athletics. Because intramural activities were originally initiated and conducted by students and were carried on outside of regular school hours on a voluntary, noncredit basis, they were considered extracurricular in nature. However, when the concept of the curriculum was broadened to encompass all the activities conducted under school auspices, both intramural and interschool athletics came to be considered legitimate curricular activities. Today, the intramural program is an integral part of the physical education program and justifies the expenditures and attention given to it.

The purpose of intramural sports is to supplement the curricular activities of physical education in order that the objectives of physical education may be more completely realized. Intramural activities have the same relation to required physical education as the school paper has to journalism and debating has to public speaking. The physical education curriculum functions mainly in developing the fundamentals of various sports and knowledges and of appreciations and desires in connection with them. An adequate amount of competition is not possible in the instructional classes. Specialization is impossible because of the small time allotment and the large number of activities which deserve consideration. Intramural athletics offer the opportunity for more competition and for specialization in preferred activities. The required program should develop the fundamental skills, techniques, and knowledge of golf, tennis, badminton, handball, swimming, volley ball, softball, wrestling basketball, baseball, and other sports. To the greatest extent possible, an appreciation of these different sports and a desire to engage in them further should be established.

Each student will have individual preferences which he should express in intramural athletics. By continuing his participation, he will develop more skill and realize more pleasure. An individual enjoys doing what he does well. With the increased skill and satisfaction comes a heightening of all the value, physical, mental, and social, which are attributed to physical education. Intramural athletics, arising out of the required activities, will not only result in

the maximal function of the physical education curriculum but will bring about a more effective intramural program. The extension of the work of physical education into the informal activities of the intramural program naturally calls for a close co-operation between those in charge of both programs.

Interscholar athletics represent the peak of the physical education pyramid. The poor and mediocre athlete expresses himself in intramural sports, but the place for the superior athlete is in interschool sports. The division of students into groups of approximately equal ability is endorsed by educators. Certainly, there are more educational values to be derived when the skilled athletes and the poor and mediocre athletes compete against opponents of equal ability. The greatest good of the greatest number should be the athletic ideal, and it can only be realized by a comprehensive, integrated physical education program, including the required, intramural, and interschool activities. Each of these phases of the total program should aid and supplement the others. The interschool program serves as an incentive to the required and intramural programs. Intramural athletics must not be conducted as a training ground for varsity athletics. There can be no objection, however, if out of the intramural activities varsity material is developed, provided this is incidental.

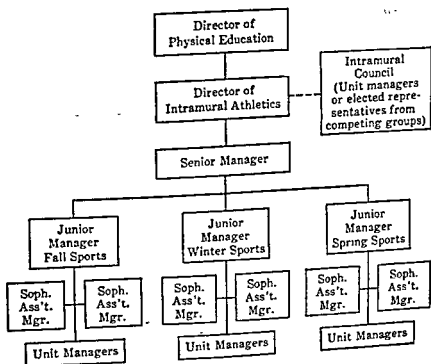
Organization of the Intramural Department. The intramural activities should be an integral part of the physical education program. As such, it should derive its financial support from regular school funds. Authorities are unanimous in their agreement in this matter, and it is fortunate that only a small percentage of high school and college intramural programs are administered and supported as a part of the interschool athletic program. Charts 7, 8, and 9, respectively, indicate recommended organization relationships of intramural athletics in a college, a large high school, and a small high school.

The intramural director. The intramural department is usually headed by one individual, known as the director of intramural athletics. The plan of placing one person in full charge of intramural athletics is considered the most effective way of organizing and co-ordinating all the intramural activities. However, very few schools can afford a full-time director. In the majority of institutions, the intramural director has other duties to perform in addition to those

connected with the administration of the intramural department. He may be the director of athletics or physical education. He is frequently a coach and just as often an instructor of physical education. Regardless of what his other duties may be, the intramural director should be the person best qualified for the position.

CHART 7

Organization of Intramural Program for Colleges

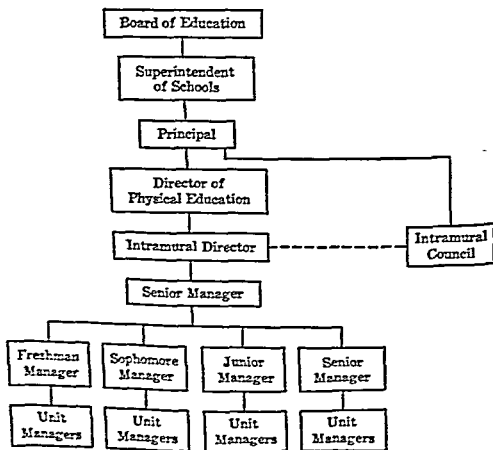


An essential criterion of the intramural director is enthusiasm. Regardless of other desirable qualifications, the director will not be successful in overcoming the difficulties and problems he will encounter unless he gives dedicated and resourceful leadership to the program. A desultory, disinterested attitude on the part of the director toward intramurals explains many weak programs.

Organizational ability is a prerequisite to success. Professional preparation in the organization and administration of intramural athletics is invaluable. He must have an understanding of the relationship between the physical education service program and intramurals.

CHART 8

Organization of Intramural Program for Large High Schools

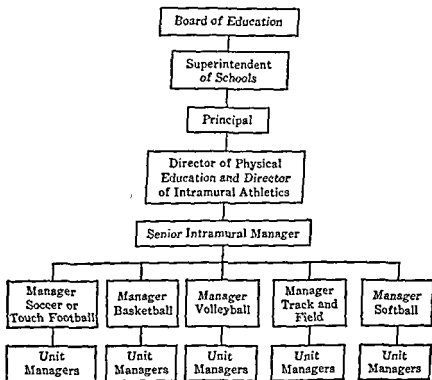


The common practice of securing training in service is costly while the training is being obtained. The most readily available individual will not often be a successful director. Neither will an intramural department function properly when the various coaches of the different sports combine to administer the program. The custom of having coaches assist in the intramural department has

been criticized on the grounds that the coaches are primarily interested in developing candidates for their respective teams and that this interest dominates their intramural duties. If coaches had adequate physical education background, there would be little

CHART 9

Organization of Intramural Program for Small High Schools



objection to their work in intramurals. The intramural director requires assistance, and the coaches can be of great help in their various specialties or in their off seasons.

The practice of permitting students to control intramural athletics has serious disadvantages. The proper administration of the program requires more time than students can afford, and charges of politics and favoritism often result. Furthermore, students graduate after

they have accumulated sufficient experience to handle the position capably. Fluctuating leadership means fluctuating policies. The mere fact that a staff member is the director does not indicate that all of the opportunities for valuable experience and training for students are eliminated.

Intramural councils. Many secondary schools and the great majority of colleges and universities make use of intramural boards, councils, or committees to help administer the program. It is usually made up of the intramural director, senior manager, representatives of the participating groups, a member from the student council, and interested faculty members. The functions of these boards include formulating policies, making eligibility rules and modifying the rules of various sports to meet local conditions, acting upon protests, deciding forfeits, and approving the budget.

Such a board is of great assistance to the intramural director. In addition, it provides an exceptional opportunity for students to exercise leadership. The democratic process also gives the program more vitality and appeal because the students feel they are a part of it.

Student managers. The student managers really perform most of the work of the intramural department. The number of managers varies from school to school, but in nearly every case there are fewer senior managers than sophomore and junior managers. A large number of sophomore managers try out during the year. They usually are assigned to one sport during a season, and they assist in conducting the competition in this activity. From this list two or four junior managers are selected on the basis of their service and qualifications. One senior, who is called the intramural manager, is chosen to cooperate with the intramural director in conducting the whole program. Oftentimes, the director serves in an advisory capacity and permits the manager to administer the program. The duties of the senior manager vary, but in general he is responsible for making out schedules, for notifying teams of their games and assignments, for promoting publicity, for assembling data on contests, for assigning duties to the sophomore and junior assistants, and for general supervision of the program. The many responsibilities and duties of the senior intramural manager combine to present an exceptional practical training in leadership and executive ability.

The senior manager is usually the only manager who is given an

award, which is usually a school letter with or without a sweater. When a letter is awarded, it is usually modified in some way to distinguish it from the regular varsity letter. Some schools award gold medals, others numerals or special intramural insignia. In rare instances the senior manager is paid for his services. Some schools present the junior managers with an award. The sophomore managers are not given awards, but they receive valuable experience acting as officials, scorekeepers, and timekeepers, and handling other details.

Team managers. Each unit participating in the intramural program should be represented by a manager. This individual serves as the contact man between the intramural department and the unit. He usually acts in this capacity for the school year. He submits entries, eligibility lists, and protests, if any. He announces scheduled contests and assumes the responsibility of getting his team to the proper area at the correct time. He may also coach the team, although many units will appoint separate coaches. Some individual must assume the responsibility of the team when an intramural contest is being played. This may be the team manager, the coach, or the captain.

Intramural Finances. Fortunately, intramural athletics are not expensive. Considering the large number of students who participate, the cost per capita is exceptionally small and the value received is extraordinarily large. As Brammell points out, "The school administrators and boards of education will probably realize more benefits to pupils per dollar invested in a well-planned and well-directed intramural program of sports than in almost any other activity in which pupils participate."¹

High schools. In a survey of intramural programs in the high schools of Pennsylvania Krupa found that the per pupil cost in small high schools (1-199 pupils) was 92 cents; for the medium school (200-499 pupils) 44 cents; for the large school (500-999 pupils) 32 cents; for the very large school (over 1000 pupils) 27 cents; and for all high schools 36 cents.² The cost per student participant for

¹ R. P. Brammell, "Intramural and Interscholastic Athletics," *National Survey of Secondary Education* (Washington, D. C., U. S. Office of Education, 1932), Bull. 17, p. 63.

² Joseph H. Krupa, "A Study of Intramural Sports for Boys in the Public Secondary Schools of Pennsylvania" (Ed.D. dissertation,) University of Pittsburgh, 1953, p. 54.

the small schools was \$1.86; for the medium schools \$1.42; for the large schools \$1.09; for the very large schools \$1.20; and for all schools \$1.24.

The money is expended upon awards, office supplies, labor, equipment, intramural handbooks, insurance, officiating, and salaries. The per capita cost of intramurals in high schools is not so great as in colleges. Where all the students are located in one building and are readily available, office expense is materially reduced. The high school awards are much less expensive also. The officials in high school intramurals are not paid nearly so frequently as they are in college intramurals. The equipment item may be great or small, depending upon the extent to which equipment is furnished to the players. Intramural departments, as a rule, require the players to supply their personal equipment. Footballs, basketballs, soccerballs, volleyballs, nets, bases, boxing gloves, and the like are usually provided. This equipment is ordinarily borrowed from the physical education or athletic departments. A charge is assessed against the intramural program in some schools for the use of this equipment. The regular physical education facilities are used when available.

The physical education budget is the major source of intramural funds. In Krupa's investigation it was revealed that 84 per cent of the revenue for intramural athletics in Pennsylvania high schools came from physical education budgets.³ This is as it should be. An admission charge to a special intramural event is a good source of revenue. Other sources are concessions, carnivals, entry fees, student activity budget, and interscholastic athletics. The trend is definitely away from depending upon gate receipts from interscholastic athletics.

Colleges and universities. Scott, in a survey of intramural programs in liberal arts colleges, found that the cost of intramural athletics in small institutions was \$2.02 per male student, or \$3.14 per student participant; in medium-sized colleges the cost was \$1.79 per male student, or \$3.07 for each participant; and in large colleges the cost was \$1.35 for each male student, or \$2.11 for each participant.⁴ The average cost for all institutions was \$1.62 per

³ Krupa, *op. cit.*, p. 57.

⁴ Elmer B. Scott, "An Evaluation of Intramural Sports Programs for Men in Selected Liberal Arts Colleges" (P.E.D. dissertation, University of Indiana, 1954).

student, or \$2.64 per participant. Another study revealed that the over-all cost averaged \$1.59 per student enrolled.⁴ In state institutions the average was \$1.89 per student; in private colleges it was \$1.15; and in denominational institutions it was \$1.06.

The major expenditures are for awards, office supplies, postage, officiating, intramural handbooks, secretarial assistance, equipment, and salaries.

The physical education budget is the main source of support for intramural athletics in colleges and universities. However, in some institutions, the sole or major source of support comes from inter-collegiate athletics. A number of colleges and universities use student fees to finance intramurals. Entry fees from the competing groups supply a portion of the necessary funds. There is much less reliance upon concessions, carnivals, plays, magazine sales, and other student efforts in colleges than in secondary schools.

Intramural finances in the colleges are handled by the athletic director, the business manager, the intramural director, and the head student manager. Student entry fees are usually collected by student managers. The intramural director approves all expenditures. The intramural director co-operates with either the athletic director or the head of the physical education department in developing the intramural budget.

Units of Competition. Good units of competition contribute a great deal to the success of the intramural program. Selection of competing units is not a problem in the individual sports, for each individual is a unit by himself (though certain groups encourage their members to enter into individual competition). Strong units for team sports are necessary, however, inasmuch as teams tend to break up after several defeats. Homogeneous groups which are bound together by some common bond make the best competitive units.

College and university units. In institutions of higher learning, the fraternity is the most effective unit of intramural competition. Dormitories are also strong units, particularly if they are not too large. The trend to divide students into smaller dormitory groups will make for better competitive units. Both fraternity and dormitory

⁴ H. S. Cherry, "Summary Report on Financing College Intramurals," *Proceedings of the Fifty-Sixth Annual Meeting, The College Physical Education Association* (1953), pp. 58-66.

students develop a strong group solidarity, and they are easily organized for intramural competition.

In the past, class units, that is, freshmen, sophomores, juniors and seniors, have been extensively employed. Interclass competition is especially successful in the smaller colleges. Divisions within the college or university, such as liberal arts, engineering, and education, are natural groups which might be used as bases of competition. In larger institutions, the various colleges can be divided into their different departments, such as civil engineering and mechanical engineering and further subdivided into freshman, sophomore, junior, and senior engineering. Other competitive groups may be military units (where ROTC programs are in operation), sports clubs, literary societies, and eating and boarding clubs.

The biggest problem of most intramural directors is to obtain sufficient participation of the unorganized, independent students. These students will participate satisfactorily in single and dual sports, particularly if the tournaments are well publicized and energetically promoted. The real difficulty is to secure participation in team sports. All methods of motivating and promoting participation must be consistently and effectively employed to get a substantial percentage of independent students into the program.

A number of schools have discovered that the best way to organize the independents is to divide the entire student residential area into districts or zones. The zones are carefully worked out so that each contains approximately the same number of independent students. For example, at the University of Illinois, the campus is divided into 43 zones, each of which has approximately 175 students. Each zone operates under the leadership of an athletic manager who makes every effort to organize the students within his area for intramural athletics. In most larger schools the independents compete among themselves, but the winners meet the intrafraternity and dormitory winners for the championship of each sport.

Cumberland University has a unique system of organization which can work out well in a small institution. All students are assigned by lot to one of the eight following teams:

- | | |
|-----------|-----------|
| 1. Red | 5. White |
| 2. Green | 6. Brown |
| 3. Yellow | 7. Orange |
| 4. Black | 8. Blue |

New students are assigned to the team having the fewest members on its roster. Once assigned to a team, a student remains a member as long as he attends the university.

High school units. Brammell, investigating the bases of competition for high school intramurals, found the most common units of competition to be as follows:⁶

ENROLLMENT OF HIGH SCHOOL

	100 and under	101-300	301-750	751-2000	2001 and over
Physical education classes	6	13	17	26	13
Grades	16	29	33	41	13
Home rooms	1	8	22	29	9
Weight	2	5	11	19	11
Height	1	5	5	11	6
Age	2	4	4	5	7

Krupa's study showed the following breakdown for Pennsylvania high school:⁷

	Small schools	Medium schools	Large schools	Very large schools	Total
Grades (classes)	60	123	75	37	295
Home rooms	30	76	84	36	226
Pick-up groups	31	49	33	13	126
Physical education classes	26	44	22	17	109
Independent groups	15	22	22	12	71
Clubs	5	13	11	9	38
Vocational classes	5	12	3	7	27
Academic classes	3	6	1	4	14
Boy Scout troops	5	2	4	2	13

Both studies revealed that the most frequently employed unit of competition was the grade or class in school, that is, *freshman, sophomore, junior, and senior*. In small schools this is a convenient unit. In larger institutions, however, the percentage of students who can participate is not large enough to justify using this plan; but this objection may be minimized by having two or three teams from each grade or class. Students in a grade are not so tightly knit and

⁶ Brammell, *loc. cit.*, pp. 26-27.

⁷ Krupa, *op. cit.*, p. 61.

unified as they are in a home room; thus the home room has become a popular unit of competition in the larger secondary schools. This is a natural unit, which is usually permanent for the school year. Ordinarily, the students are in the same grade. They are together often enough to develop a group spirit and loyalty. The membership of the home room is such that the majority of students will be able to participate during the year. Students in home rooms are also easy to organize. Communication poses no problems.

The studies by Brammell and Krupa indicate that physical education classes are frequently used as a basis of intramural competition. This does not mean that intramural competition should necessarily be carried on during class periods. What it does suggest is that the physical education period be used to stimulate interest in the intramural program and that teams be organized from the class members.

According to Brammell the persons selecting team members are as follows:*

ENROLLMENT OF HIGH SCHOOLS

	100 and under	101-300	301-750	751-2000	2001 and over
Physical education teacher	3	17	36	41	17
Group captain	6	15	24	32	15
Athletic coach	13	21	23	21	10
Homeroom teacher	2	4	5	4	3
Other faculty member	0	3	6	6	1

The above table indicates that a large measure of the responsibility for organizing and directing intramural teams is undertaken by the pupils themselves. This is a healthy sign and deserves to be encouraged further.

Competitive units for women. It is as important, if not more important, for women to have satisfactory bases of competition for their intramural activities. Girls and women do not enter into intramural activities as readily as boys and men do, and the most effective competitive units are desirable. College women commonly use sororities, classes, dormitories, physical education classes, and arbitrary groups. High school girls employ classes, home rooms, physical education classes, residential districts, and groups classified

* Brammell, *loc. cit.*

according to height and weight. The age-height-weight classification has proven peculiarly unsuccessful for girls. The classification on the basis of age alone appears to be as good as any.

The Program of Activities. What is included in the intramural program is dependent largely upon the activities which are presented in the physical education service program. If intramural activities are to arise out of the curricular activities and return to enrich them, then the intramural program must be based essentially on the physical education program. This is sound procedure, for activities in which students have had very little training and experience would hardly be so acceptable as those with which they are familiar.

The intramural programs will naturally vary in different localities, just as the physical education programs will. Winter sports are extremely popular in the northern states, but they would be impossible in the south. In certain areas, soccer is more popular than any other fall sport. In other localities wrestling and boxing are more enthusiastically received than basketball. There are, however, certain activities which seem to be in demand everywhere. Basketball, touch football, softball, volleyball, tennis, track and field are almost invariably successful intramural activities. Girls prefer volleyball, basketball, swimming, softball, tennis, and golf. Country-wide, basketball is undoubtedly the most popular intramural activity. Practically all students are familiar with and enjoy the game. The number of players is small and can be readily assembled. Very little equipment is needed, and the game does not consume an inordinate amount of time. Sports which are familiar, inexpensive in time and equipment, and free from long, arduous training periods are the most preferred intramural activities. Students engage in intramural sports for the joy and recreation which they receive and thus, for the most part, are unwilling to undergo hard work and punishment.

The range of activities naturally varies with the size of the school. The large university must provide a greater variety of activities than the small high school. Something for everyone all the time should be the goal of the intramural department. In order to provide for individual differences, several different activities should be available at all times. Sports in which little interest is demonstrated should be eliminated from the program after they have had a fair trial. There is a danger in having too many activities, but that is

to be preferred to too few activities. The average number of intramural activities in small high schools ranges from three to six. In large colleges and universities, 25 to 30 activities are frequently offered.

The trend in education to make special provision for those students who are subnormal should be carried over into intramural athletics if it is at all possible. Some intramural departments have taken steps in this direction. In some schools, there are Class A and Class B teams, particularly in intrafraternity competition in college. It is desirable to have experienced and inexperienced classifications in certain individual sports, such as boxing, wrestling, and fencing. At the University of Illinois, tournaments are conducted among the students enrolled in the various physical education courses. This type of competition is particularly well adapted to the beginner, as the experienced performers are excluded.

The activities for the intramural program may be selected from the following:

ACTIVITIES FOR HIGH SCHOOL AND COLLEGE BOYS

<i>Fall</i>	<i>Winter</i>	<i>Spring</i>
Archery	Basketball	Archery
Cross-country	Badminton	Baseball
Touch Football	Wrestling	Golf
Speedball	Swimming	Horseshoes
Soccer	Volleyball	Softball
Softball	Bowling	Swimming
Tennis	Foul Shooting	Tennis
Golf	Handball	Track and Field
Football Field Meet	Squash	Volleyball
Swimming	Table Tennis	
Volleyball	Skating	
	Indoor Track	
	Relay Carnival	
	Water Polo	

Eligibility for Intramural Competition. Very few schools set up school eligibility requirements for intramural participants. The opinion prevails that a student should be allowed to participate in intramural athletics, regardless of his scholarship, if he is permitted to remain in school. Little would be gained by barring players from intramural competition because of scholastic deficiencies. The

ACTIVITIES FOR HIGH SCHOOL AND COLLEGE GIRLS

<i>Fall</i>	<i>Winter</i>	<i>Spring</i>
Archery	Badminton	Archery
Deck Tennis	Basketball	Deck Tennis
Field Ball	Bowling	Field Ball
Field Hockey	Deck Tennis	Field Hockey
Golf	Fencing	Golf
Softball	Foul Shooting	Horseshoes
Soccer	Handball	Softball
Speedball	Shuffleboard	Soccer
Swimming	Skating	Speedball
Tennis	Swimming	Swimming
Volleyball	Table Tennis	Tennis
	Volleyball	Track and Field
		Volleyball

intramural department is more interested in encouraging students to participate than in setting up barriers to their participation. The eligibility regulations are chiefly concerned with the amount of participation and the conduct of the players. Some of the common regulations are:

1. Varsity squad members are ineligible for all intramural activities during the varsity season. Any player who is dropped for ineligibility may not compete in that sport in the intramural program.
2. Letter men are ineligible to compete in the intramural sport in which they won their letter.
3. Freshmen squad members may not compete in intramural sports at the same time that they are on a freshmen squad.
4. A student who is barred from varsity or freshman athletics because of professionalism is not permitted to compete in the intramural sports in which he has professionalized himself.
5. A student may play on only one team during a given season. He may engage in one or two individual sports, however, simultaneously with the team sport.
6. After playing in one contest with a given team, a player may not transfer to another team in that sport.
7. Any special student or any student taking less than half the normal work shall be ineligible for intramural competition.
8. Any student who is on probation for disciplinary reasons may not participate in intramural activities.
9. Any team using an ineligible player shall forfeit the contest or contests in which that player participated.
10. Any player who is guilty of unsportsmanlike conduct may be declared ineligible to compete in intramural sports.

Some criticism has been directed against the last rule. The critics point out that the individual may be taught sportsmanship if allowed to continue his competition, but if he is restrained from competing, he may engage in less wholesome activities. However, because of the inexperienced officials and the bad example set for other players, it seems desirable to have some effective method of controlling these players. The loss of the privilege of competing in intramural athletics is a penalty which few interested boys care to incur.

Medical Examinations. If it is desirable for varsity athletes to undergo a thorough medical examination, it is equally desirable for intramural competitors to do likewise. Although intramural athletics are not so strenuous as interschool athletics, the varsity candidates undergo an organized, supervised conditioning program which intramural athletes do not. Varsity players are provided with superior equipment, and they are given better, immediate attention in case of injury. Health may be seriously impaired in intramural competition, and the most essential safeguard is the required medical examination for all competitors. Miller found that the practices in this respect differed widely in colleges and universities.*

PHYSICAL EXAMINATIONS IN COLLEGES

	<i>Number of colleges</i>	<i>Percentage reporting</i>
Examination at beginning of freshman year only	72	37
Examination at beginning of each school year	42	22
Examination at beginning of freshman year and before the more strenuous sports	40	21
Examination only before the more strenuous sports	18	9
No examination	11	6

In his study of intramural athletics in Pennsylvania secondary schools Krupa found that only 37 schools out of 471 required a medical examination other than the regular school medical examination for participation in intramural sports.

Preliminary Training Periods. In order to safeguard further the health of the intramural contestants, preliminary training periods are advocated. The instances where boys have entered swimming and

track meets and other strenuous sports, such as boxing, wrestling, speedball, soccer, basketball, and water polo, without a day of preliminary practice are far too numerous. The intramural department should make it impossible for a boy or a girl to engage in strenuous activities without an adequate conditioning program. This is more difficult to do in the team sports than in the individual sports. Each unit sponsoring a team should be urged to practice several times before the first contest. The schedule should be so arranged that this preliminary practice is possible. Students engaging in individual sports which call for considerable endurance should be required to practice a definite number of times. Unless a boy is able to show that he is in excellent physical condition as a result of engaging in other activities, he should be denied permission to participate in strenuous activities if he has not practiced the required number of times. The intramural director and the various coaches should decide upon the minimum number of training periods which are needed to prepare adequately for competition in each sport. After the number of training periods has been set up, each entry should be required to report to the intramural manager or the coach of that sport. Thus, the boy who plans to enter the mile run in the intramural track meet should report to the intramural manager or track coach the required number of times. Such a plan will go a long way toward making intramural athletics, particularly wrestling, track, and swimming events physically wholesome.

Time Periods. The best time for intramural contests is in the afternoon after the classes are over. Students prefer it as do their parents. Faculty supervision is easier to obtain. For these reasons intramural contests should be scheduled at this time if it is at all possible. The major problem is the conflict with interschool squads regarding the use of facilities. This is usually more acute during the indoor season than in the fall or spring. A partial solution is to play intramural contests on the afternoons when the varsity basketball team plays games. Some schools arrange to practice the varsity team at night once a week in order to provide some opportunity for intramurals in the afternoon. In certain schools a period is provided for intramural competition before varsity practice starts.

The noon-hour period is extensively used in high schools. In some situations it is possible to play off contests before the participants eat. Many intramural activities of a somewhat less strenuous type

such as volleyball, softball, table tennis, horseshoes, and foul shooting, may be conducted after lunch. If the activity causes the participants to perspire, they should be required to shower and change clothes afterward.

A considerable number of schools schedule intramural contests during the regular physical education service classes. If a school had a daily period of physical education this might be justified. It is difficult to defend this practice in institutions where physical education is scheduled for only two or three periods per week. Under these circumstances sufficient time is not available to provide the instruction which is necessary in the service program.

Because of the lack of space, it is frequently necessary to arrange intramural competition at night. This is unsatisfactory because it interferes with the students' homework and necessitates an additional trip to school. Parents do not take kindly to night intramurals. Forfeits are much more frequent at night than in the afternoon. The problem of providing custodial services is created. If night play cannot be avoided, the schedules should be arranged so that no student will be required to spend more than one evening per week in intramural activities. An excellent time for intramurals is on Saturday mornings and, frequently, on Saturday afternoons. The physical education facilities are not being used, and the majority of students are unoccupied at these times.

The following figures from Krupa's study show the time schedule for intramural sports in Pennsylvania high schools:¹⁰

<i>Time</i>	<i>Small schools</i>		<i>Medium schools</i>		<i>Large schools</i>		<i>Very large schools</i>		<i>Total</i>	
	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>	<i>No.</i>	<i>Per cent</i>
Immediately after school	45	47	90	51	93	67	50	84	278	59
Noon hours	55	58	88	50	63	45	13	22	219	47
Gym classes	28	29	32	18	19	14	13	22	92	20
Evenings	11	12	25	14	22	16	8	13	66	14
Club periods	9	9	23	13	12	9	7	12	51	11
Free periods	19	20	13	7	10	7	7	12	49	10
Saturdays	4	4	10	6	26	19	6	10	46	10
Varsity on trip	3	3	11	6	4	3	6	10	24	5

question, accompanied by a small fee, which is returned if the protest is granted but kept if it is not. This gives the students time to cool off and reconsider their protest. Protests will be reduced if the intramural department has someone available at the various games to settle disputes. The protests which are filed with the intramural department are usually acted upon by the administrative board of control. No consideration should be given protests which involve mistakes in judgment by the officials. Legitimate protests are those based upon the question of ineligibility of players and mistakes involving interpretation of the rules.

Forfeits. Forfeits are the bane of the intramural director's existence. They present a problem for all intramural departments, although the better organized departments are less troubled in this respect than the poorly organized ones. If the students and organizations regard their intramural participation as a privilege, there will be fewer forfeits. Some departments place a heavy penalty upon forfeits, and this appears to reduce them. This penalty usually involves the loss of intramural points, although some departments deprive the forfeiting organization of all intramural privileges for the remainder of the year. This seems to be a heavy penalty, but it has worked to reduce forfeits. The cause of forfeits, in most cases, is discouragement following repeated defeats. If the competition is equalized to a reasonable extent, some of these forfeits can be prevented. The number of forfeits is appreciably diminished where the weaker organizations compete among themselves.

Intramural Publicity. In order to arouse and maintain interest in the intramural program, the students should be kept informed constantly about the activities of the program. Continuous publicity will do much to stimulate additional students to enter into intramural sports and, at the same time, will serve as an added incentive to those who have been participating. Good publicity will also enable the intramural department to operate much more efficiently, as the students will be better informed of playing dates, playing locations, changes in schedules, entry dates, league standings, playoffs, and many other facts which should be known.

The best source of intramural publicity is the student newspaper. Space is usually easy to obtain, and if the intramural director makes effective use of it, he can stimulate great interest in the program. Items of unusual interest, noteworthy achievements, unique program

features, league standings, schedules, and daily results should be publicized. The local newspaper has been found to be effective in publicizing the intramural program. This is particularly true of high school intramurals.

The bulletin board is an excellent means of informing the student body of the intramural program. Every intramural department should have at least one bulletin board. In some schools several boards are used to good advantage. The bulletin board should be strategically located so that the greatest number of students will see it. It should be well lighted and well maintained, with eye-catching, up-to-date announcements, posters, and schedules.

Announcements at student gatherings and in physical education classes are a frequently used method of conveying information to students. Home-room announcements are very helpful in high schools. Mailing information bulletins to students has been effectively used in some institutions. A recommended procedure is to gather all entering freshmen and new students together and explain the program to them. Such a meeting may well be a part of the orientation sessions which many institutions provide new students. At this occasion intramural handbooks can be distributed and interest-finding questionnaires secured from all students.

Intramural handbooks should be available to all students if it is at all possible to afford them. Many high school and college intramural departments furnish handbooks and feel that the expense is well justified. Intramural handbooks give the student a clear picture of the intramural department, its organization, its administration, its rules and regulations, its leaders, the program of activities, the point systems, and additional facts with which the students should be familiar. The intramural director and managers will find that the handbook will save them many explanations and interpretations of the rules. The students will find that the handbook will give them a much clearer understanding of the operation of the intramural department and enable them to conduct their activities more intelligently.

Intramural Coaching. A few institutions provide instruction for the intramural participants. The schools which give physical education credit for intramural competition frequently follow this practice. Such a plan has much to recommend it, but it has the disadvantage of overworking the already overworked physical education staff.

When a varsity coach or a recognized authority coaches intramural contestants, considerable interest is aroused among the students. In some colleges and universities, students specializing in physical education may be used; but these students rarely have the prestige and influence to perform this task successfully. The desirability of coaching intramural participants is unquestioned; but until more assistance is given the physical education departments, the instruction will be confined to the physical education classes in most colleges and high schools.

Intramural Awards. What has been said in the previous chapter in regard to awards may also be applied to intramural awards. Those who advocate the discontinuance of awards are attacking a universal practice. Awards are granted in all walks of life, and if a reform is desired, more would be accomplished by starting the proper training in infancy. Crusading physical educators would produce few worthwhile results if awards were abolished only in physical education and in no other lines of endeavor. The use of awards as incentives to intramural participation can be defended as long as they remain inexpensive. Intramural awards to individuals in the majority of high schools cannot be in excess of \$1.00. The trend appears to be quite definitely away from the expensive prizes which were so characteristic a number of years ago. Intramural awards are becoming symbols of achievement and, as such, are justifiable.

The winners of individual competition may be awarded medals, cups, class insignia, or ribbons. Group competition is usually divided into leagues comprising the permanent groups, such as fraternities and dormitories, and the temporary groups, such as independents. The winning teams of the permanent group are awarded pennants, shields, plaques, or cups. The winning temporary groups would have no use for team trophies; so they are usually given emblems or medals. A larger, more pretentious cup is awarded to the permanent group and to the individual for the best all-year performance. Some institutions purchase the awards before the competition for them commences. This procedure is to be recommended, as the students have the opportunity to see the awards for which they are competing, and it insures prompt distribution of the awards after they have been won. An award which is granted six months after it has been won has lost much of its value to the student.

Intramural Statistics. The intramural department ought to have careful records of student participation in the activities of the program. These records are valuable within an institution itself, but they should not be used as a basis for comparison with other intramural departments. Some directors place great emphasis upon accumulating impressive statistics. They evidently harbor the belief that the success of the department is measured by the size of the participation statistics they amass. The progress shown by the department from year to year would be a better criterion of its success than would be a comparison of its participation with that of another institution.

In order to have a true picture of the intramural participation, the director will want to discover (1) the total number of students who have been reached by at least one activity, (2) the average number of sports in which each student participated, and (3) the average number of games played in each sport by each student or the participation hours of each student. The participation hours of every student in the separate activities is extremely valuable information to have, but more difficulty is involved in securing it. It is quite necessary that all of the above be compiled every year. The values of these participation records are as follows:

1. The gain or loss in intramural participation over the previous year can readily be ascertained.
2. The proportion of the entire student body participating in intramural sports will be discovered.
3. Whether the students are taking advantage of the intramural program throughout the year or are only participating sporadically will be disclosed.
4. The popular and unpopular activities will be discovered. The gain or loss in interest in the various activities from year to year will be evident.
5. The most successful units of competition can be ascertained.
6. Excessive participation on the part of some individuals can be checked.
7. The statistics may be used to show the need of greater financial assistance.
8. The success or failure of various administrative procedures may be checked.

In compiling participation statistics, a separate card should be kept for each individual. This card should give a complete picture

of the intramural participation of the student. Only the actual games in which the student engages should be recorded. A record of the informal, unorganized play of each individual would be highly desirable, but practical considerations make it unfeasible.

Methods of Organizing Competition. Tournaments both for intramural and other school purposes are discussed in this chapter. They are not presented as the meat or basic elements of the intramural diet but as the trimmings, the excessive use of which may lead to recreational indisposition. In the past it has not been uncommon to consider tennis, for example, played just for the fun of it as something less than tennis played in an intramural tournament, chiefly because the competitors could not be included in the figures used to justify the intramural program. This necessity of presenting justifying evidence, imposed upon those sponsoring intramural activities, has led in some cases to undue emphasis on tournaments and to encouraging individuals to enter too many sports events in order to swell the totals as much as possible. Despite some cases of overemphasis, however, tournaments are still valuable, and a judicious use of them adds interest and enthusiasm to the program of activities.

The type of activity, the time available, student interest, the end in view, and similar modifying factors determine the type of tournament that should be used. All types presented below have strong and weak points, but some serve one purpose well and others serve another.

Elimination Tournaments. This type of tournament involves the elimination of all competitors until only one winner remains. There are four types of elimination tournaments.

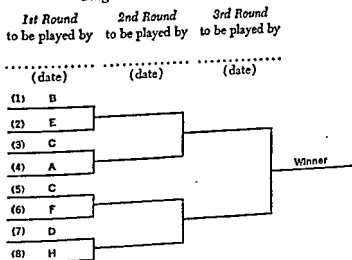
Single elimination. The single elimination tournament is the least desirable because it emphasizes the *elimination* of teams and players. For example, in this type of tournament one half of the competitors are eliminated after their first contest. Further, since a single defeat eliminates a contender, the eventual winner often is not the best team or player. Nor does the defeated finalist represent with certainty the second best team or player, since one of the teams or players in the other half of the bracket may be superior. However, despite these disadvantages, there is a place for the single elimination type of tournament. It is short and selects a winner quickly. It is interesting to watch and can be conducted with limited facilities

and a large number of entries. The use of the single elimination tournament is justified when the time available is limited.

The first step in arranging a single elimination tournament is to draw for positions. The positions in the brackets are numbered, and each team or player takes the position indicated by the number drawn, as in Chart 10:

CHART 10

Single Elimination Tournament



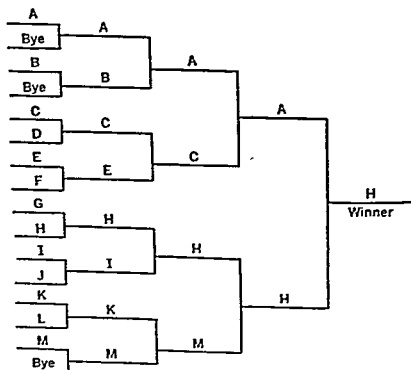
In the above tournament the location of each team was determined by the number which was drawn. Thus, the captain or representative of Team B drew #1; the representative of Team A drew #4, and so forth.

When the number of entrants is not an even power of two (that is, 2, 4, 8, 16, 32, etc.) "byes" must be arranged so as to avoid having an uneven number of teams or players left to compete in the semi-final or final rounds. All the byes must be placed in the first round. The competition is less intense in the first round, and a rest before play does not provide the advantage of a rest after a game or two. The number of byes should be sufficient to assure a number of contestants for the second round that is an even power of two. This is accomplished by subtracting the total number of entrants from the

next higher power of two. For example, with 11 entrants, subtract 11 from the next higher power of two, which is 16. This leaves 5, which is the number of byes. The total number of entrants (11) minus the 5 byes leaves 6 contestants to play each other in the first round. Three will lose, leaving 8 contestants in the second round. As 8 is an even power of two, only 2 teams can now meet in the final round. The byes should be distributed as evenly as possible between the upper and lower brackets. Chart 11 shows a sample bracket for 13 teams.

CHART 11

Single Elimination Bracket for Thirteen Teams



"Seeding" is a process employed to place the competitors who, by virtue of previous performance and reputation, are considered superior in separate brackets or as far apart as possible in the same bracket in order to minimize their chances of meeting in the early rounds. With two seeded entries one should be placed at the top of the upper bracket and the other at the bottom of the lower bracket.

If four entrants are to be seeded the third should be placed at the top of the lower bracket and the fourth at the bottom of the upper bracket. If there are byes, the seeded players get them in the order of their ranking. Thus, number one gets the first bye, number two the second, and so on. No team or player ever receives more than one bye. Seeding should be employed only when the previous record of the teams or players justifies it.

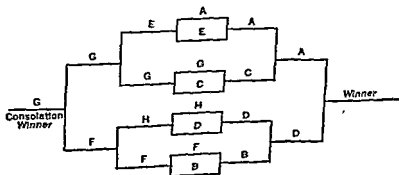
The number of games in a single elimination tournament is always one less than the number of entries. Thus, with 13 teams entered, twelve games would be required to complete the tournament. The number of rounds required is equal to the power to which two must be raised to equal or exceed the number of entries. With 13 entrants four rounds are necessary to complete the competition.

Consolation elimination tournament. This type of tournament is superior to the single elimination in that it permits each team to play at least twice. A good team that has been eliminated by the champion in the first round may continue to play with a chance to win secondary honours. More games are involved, and greater player interest is engendered.

There are two general types of consolation elimination tournaments. In the first type all the losers in the first round (or those who lose in the second round after drawing a bye in the first round) play another single elimination tournament. The winner of this second tournament is the consolation winner. Chart 12 is an example of

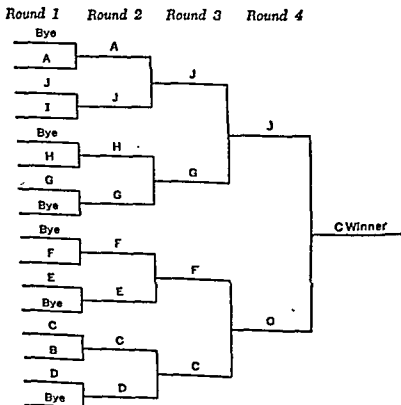
CHART 12

Consolation Tournament for Eight Teams
(First Type)



the manner in which a consolation tournament of this type with no byes is arranged.

CHART 13
Consolation Tournament for Ten Teams
(First Type)



CONSOLATION BRACKET

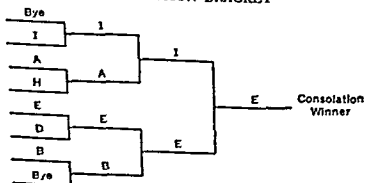
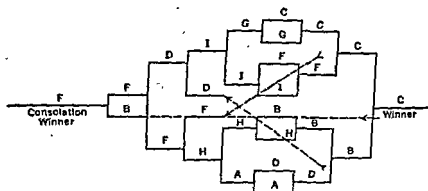


Chart 13 above illustrates the manner in which a consolation tournament including byes may be arranged.

A second type of consolation tournament provides an opportunity for any loser to win the consolation championship, regardless of the round in which the loss was sustained. Chart 14 is an example of this second type of consolation tournament.

CHART 14
Consolation Tournament for Eight Teams
(Second Type)



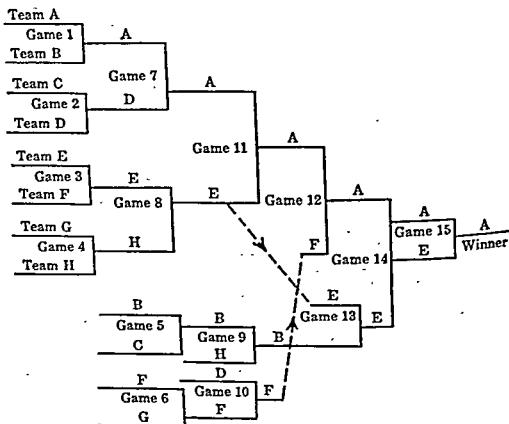
Double elimination tournament. This is a tournament in which a player or a team must be beaten twice to be eliminated; the play continues until all but one have been twice defeated. The double elimination tournament is a step in the direction of a round-robin tournament and selects a more adequate winner. It provides for at least twice as much play as in a single elimination tournament and maintains maximum interest. A double elimination tournament of 8 teams will involve either fourteen or fifteen games (Chart 15).

Bagnall-Wild elimination tournament. This is a modified form of the elimination type of tournament. Its strong point is the selection of true second- and third-place winners; its weakness is the delay following the first round before those who are to try for second or third places can be matched. It should be used when second and third places are of particular significance or when a point system is in operation and points are awarded for these places.

First place is determined by means of straight elimination play.

CHART 15

Double Elimination Tournament for Eight Teams

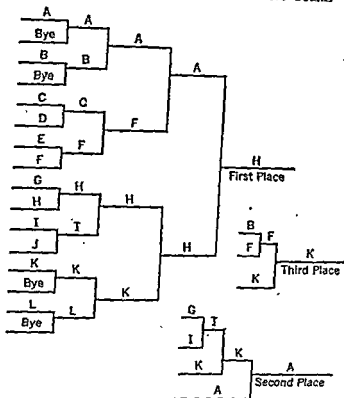


To determine second place all the competitors defeated by the champion previous to the final round compete against each other in an elimination tournament, the winner of which plays the defeated finalist for second place. In the illustration below, the defeated finalist (A) proves to be best among the teams defeated by the winner and wins second place. However, Team K (defeated by A) does not automatically become third place winner. One of the other teams defeated by A might be better than K. To determine this an elimination tournament is conducted among the teams defeated by A. The winner (second best team in the upper bracket) plays K (second best team in the lower bracket) for third place.

In the event the defeated finalist (Team A) should lose in the

CHART 16

Bagnall-Wild Tournament for Twelve Teams



match for second place, Team K becomes second-place winner. This automatically leaves Team A the third-place winner.

The playoffs for second and third place should not await the playing of the finals match. As soon as it is determined that Teams A and H are to be the finalists the elimination competition between the teams defeated by each of the finalists should begin. Thus, before the finals, Teams B and F and G and I should play matches. This will reduce the amount of play after the winning finalist has been determined.

Round-robin Tournaments. If sufficient time and facilities are available, the round-robin tournament is the best type of tournament to employ. It produces a true winner, ranks the other competitors,

permits all participants to continue play until the end, and does not require one contestant to wait until others have played the next round.

Regular round robin. In the round-robin tournament, each team or player plays each other competitor in the league. In a single round robin one game is played with each other team or player; in a double round robin two games are played with each of the opponents. In professional baseball, the major leagues use the round-robin tournament, and each team plays twenty-two games with each other team.

The positions of the teams at the end of a round-robin tournament are determined by percentages. Each team's percentage is obtained by dividing the number of games won by the total games played. For example, if a team played eight games and won seven, its percentage would be .875. In cases of tie games, the customary procedure is not to count such contests as games played when the percentages are computed. A better plan is to count a tie as half a victory and half a defeat. Thus, a team which wins seven games, loses four and ties one would have a percentage of .625 ($7.5 \div 12$).

The British and Canadian systems of determining team standings in round-robin tournaments are somewhat different. In the Canadian system, two points are awarded for each victory and one point for each tie. Thus, if a team wins twelve games, loses three, and ties one, its total points would be 25. The team with the greatest point total is the winner. The British carry this one step further. They determine points as in the Canadian system, but the point total obtained is then divided by the total possible points (total games played multiplied by two). In the example just given, the team's percentage would be .781 ($25 \div 32$).

The formula for determining the total number of games to be played in a round-robin tournament is $\frac{n(n-1)}{2}$ with n representing the number of teams in the tournament. Substituting for n in an 8-team league, the formula is $\frac{8(8-1)}{2}$ or twenty-eight games. Since there are 8 teams involved, eight is used; since each team plays every team but itself, eight minus one is used; and since it takes two teams to play one game, it is necessary to divide by two.

To draw up a round-robin schedule, place as many numbers as

there are teams in two vertical columns. The numbers should be arranged consecutively down the first column and up the second. With each number representing a team, this arrangement provides the pairing for the first round. Thus, Team #1 plays Team #8; Team #2 plays #7; Team #3 plays #6, and Team #4 plays #5 in the first round. To obtain pairings for subsequent rounds, rotate the numbers *counterclockwise* around one of the numbers which remains fixed. In the following example, number one is fixed with the other numbers rotated around it.

Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7
1 vs. 8	1 vs. 7	1 vs. 6	1 vs. 5	1 vs. 4	1 vs. 3	1 vs. 2
2 vs. 7	8 vs. 6	7 vs. 5	6 vs. 4	5 vs. 3	4 vs. 2	3 vs. 8
3 vs. 6	2 vs. 5	8 vs. 4	7 vs. 3	6 vs. 2	5 vs. 8	4 vs. 7
4 vs. 5	3 vs. 4	2 vs. 3	8 vs. 2	7 vs. 8	6 vs. 7	5 vs. 6

When an uneven number of teams is entered the same plan is used. However, in this case the bye should be placed in one of the positions and the other numbers rotated about it. The number opposite the bye signifies the team which receives the bye in that particular round. In the following example the bye is placed in the upper left-hand corner and the other numbers are rotated *counterclockwise* around it.

Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7
Bye 7	Bye 6	Bye 5	Bye 4	Bye 3	Bye 2	Bye 1
1 vs. 6	7 vs. 5	6 vs. 4	5 vs. 3	4 vs. 2	3 vs. 1	2 vs. 7
2 vs. 5	1 vs. 4	7 vs. 3	6 vs. 2	5 vs. 1	4 vs. 7	3 vs. 6
3 vs. 4	2 vs. 3	1 vs. 2	7 vs. 1	6 vs. 7	5 vs. 6	4 vs. 5

Another method of drawing up a round-robin tournament is illustrated in Chart 17. Schedules for even numbers of teams follow one general plan; those for odd numbers of teams do likewise except that the schedule is drawn for the next greater even number and the last vertical column to the right represents the byes.

The letters in Chart 17 represent teams, and the numbers playing days. Numbers at the intersection of the various vertical and horizontal columns indicate that the teams represented in the columns concerned play on the playing day indicated by the number. That is, 7 on vertical F and horizontal G means F plays G on the seventh playing day; likewise E plays B on the fifth playing day.

CHART 17

Round-Robin Schedules

EIGHT TEAM SCHEDULE

	A	B	C	D	E	F	G	H
A		1	2	3	4	5	6	7
B			3	4	5	6	7	2
C				5	6	7	1	4
D					7	1	2	6
E						2	3	1
F							4	3
G								5
H								

NINE TEAM SCHEDULE

	A	B	C	D	E	F	G	H	I	Bye
A		1	2	3	4	5	6	7	8	9
B			3	4	5	6	7	8	9	2
C				5	6	7	8	9	1	4
D					7	8	9	1	2	6
E						9	1	2	3	8
F							2	3	4	1
G								4	5	3
H									6	5
I										7
Bye										

These relationships can be noted in the arrangement of the numbers in the schedule. All numbers are in regular order except those in the last column to the right (1 following 7 is in regular order when 7 is the largest number). The last column to the right starts with the largest odd number, then goes to the smallest even number and on up through the even numbers in order, then starts with the smallest odd number and continues through the remaining odds in order. The numbers in this last vertical column, except the first and the last, are always one less than the first number.

The Lombard round robin. The Lombard tournament is a unique form of round-robin competition in which the entire tournament is completed in a day or several hours. This is accomplished by playing abbreviated contests. This type of tournament should not be thought of as a substitute for regular round-robin competition. Rather it is a special type of tournament which can be used effectively under certain conditions.

In certain sections of the South, where outdoor facilities are ample and usable during the winter, this type of tournament is used for

parish and sectional basketball play. In it the competitors are only away from home for a short time. This circumstance reduces the cost to the schools because no lodging need be provided and comparatively few meals need to be furnished. First, second, third, and fourth places are determined without putting an undue strain on any competitor.

Assuming a tournament of seventeen basketball teams and a playing time of 32 minutes, which is the customary length of high school basketball games, the tournament works as follows. Each team meets every other team or plays 16 short games. Therefore, divide 32 by 16 to give the length of time of these abbreviated games, which is exactly two minutes. Eight courts and sufficient officials to conduct 8 games at a time are required. Each team is assigned a scorer, who keeps a record of its scores for all games in one column and the scores of all opponents in another. All teams start play at one time, play two minutes, and then shift to another court to play another opponent until a complete round-robin tournament of two-minute games is played. The scores for each team are totaled for the 16 games. The opponents' score is then subtracted from each team's own score. The 4 teams with the largest positive scores are selected to play a regular round robin to decide the winner and other ranking places if desired. In the event of a tie for fourth place after the first round robin of two-minute periods, the tying teams play for the right to enter the final tournament.

Since the players of the various teams have played only the equivalent of one full time game, the first round of the final tournament of four teams can be played the day of the abbreviated round-robin. Then all teams can go home, and the four remaining contenders can return the next Saturday to complete the tournament. This assumes that they live within a radius of forty or fifty miles.

During World War II the Lombard tournament, used somewhat differently from that indicated above, was extensively and effectively employed in the army. Its great value lay in the fact that an entire round-robin tournament could be completed within a period of several hours. For example, a Lombard round-robin tournament in basketball in a league of twelve teams (66 games) can be completed in less than four hours if two courts are available and six-minute games are played. If more courts are available the time may be

further reduced. The Lombard tournament worked very successfully with from six to twelve teams playing on two or three courts. In this way, teams alternate playing and players have a chance to rest. For this reason, it is an excellent tournament for players who are not yet in condition to play full-length games. The best length of basketball games proved to be from five to six minutes.

To assist in scoring the Lombard tournament, a scoreboard such as indicated below has been found helpful. For each game played, two scores must be recorded, one for each team. A team's scores are recorded and added *horizontally*. If Team #4 defeated Team #1 by a score of 10 to 5, Team #4's score would be $+5$, and Team #1's score would be -5 . If Team #2 defeated Team #3 by a score of 6 to 0, its score would be $+6$, and Team #3's score would be -6 points. These scores are recorded as follows:

	Game #1	Game #2	Game #3	Game #4	Game #5	Game #6	Game #7	Total Score
Team #1	-5							
Team #2	$\div 6$							
Team #3	-6							
Team #4	$\div 5$							
Team #5								
Team #6								
Team #7								
Team #8								

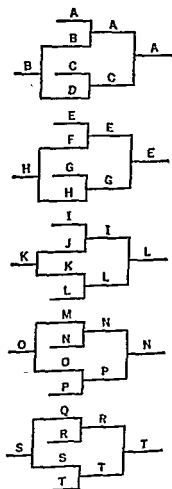
The Lombard type of tournament can also be employed effectively for volleyball, speedball, soccer, touch football, cage ball, American ball, handball, badminton, squash, and tennis. When used for volleyball, handball, squash, badminton, and tennis, only one game or set should be played against each opponent.

Combination Tournaments. An excellent tournament for intramural purposes should (1) provide for even or well-matched competition, (2) be neither too long nor too short, (3) exclude none from competition after a game or two, (4) require few or no competitors to play a great many more games than other participants, and (5) select a true champion. There are several forms of combined elimination and round-robin tournament that meet these requirements reasonably well.

CHART 18

Elimination Bracket

(For a Combination Elimination Round-robin Tournament)



First league: A, E, L, N, T
Second league: C, G, I, P, R

Third league: B, H, K, O, S
Fourth league: D, F, J, M, Q

For purposes of illustration, a combination elimination round-robin elimination tournament is presented for 20 basketball teams (Chart 18). Two rounds of a double elimination tournament are played first to classify the competitors into four leagues. To do this, seed teams as well as possible and play the first round; then have winners play winners and losers play losers. Place those who won twice in the first league; those who won one and then lost one in the second league; those who lost one and then won one in the third league; and those who lost two in the last league.

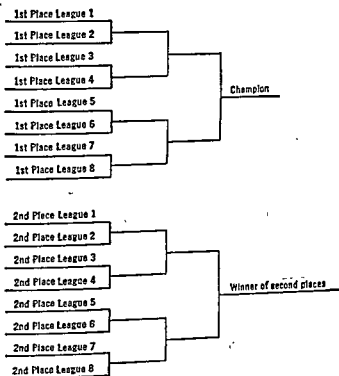
Now that the teams are classified, play a round-robin schedule for each league. Each team will then have played six games, two in classifying and four in its league. Place the first- and second-place winners of leagues one and two and the first-place winners in leagues three and four in the final championship tournament. This will discourage the practice of losing in the classifying rounds in order to gain a place in a weaker league. A double elimination tournament is recommended for these six teams; but if time is short, a straight elimination may be necessary. A round-robin tournament may be used but it is not to be recommended, since most of the teams are already eliminated, and the remaining six would need to play much more than the other teams.

An interesting method of providing even more participation is to group the place winners in each league together in single elimination tournaments. For example, put all first-place winners together as in the above example; do likewise with the second-place teams in each league. Similar tournaments are drawn up for the teams in third, fourth, fifth and sixth places. (See Chart 19.)

At times, the space and time available are not adequate to permit even an elimination tournament for a large number of entries. When this occurs in certain sports the number of participants can be quickly reduced by holding a qualifying round in which only the best performers qualify for the finals. Such sports as track and field, swimming, golf, bowling, and foul shooting are well adapted to the use of qualifying rounds. For example, in a golf tournament all the contestants may play a qualifying round and the sixteen players with the best scores thus play a single elimination tournament for the championship. To simplify tournament play the number of entries which qualify is usually a power of two.

CHART 19

Single Elimination Tournament for Finalists



Challenge Tournaments. This form of tournament is desirable when the activity is such that it can be carried on by the players independently without formal schedules. It is used for single or dual competition rather than team sports. Tennis, golf, handball, squash, badminton, boxing, wrestling, horseshoes, and archery are the activities for which this type of competition is most commonly used.

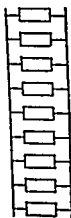
A challenge tournament affords competition with contestants of near equal ability. It provides an opportunity for all competitors to continue play since none is eliminated. It is entered into with more zest in situations where all the players know each other. This type of tournament is useful in selecting team members in individual sports. When used this way, the players at the top of the ladder

represent the institution in interschool competition. The ladder tournament is widely used by wrestling coaches to select the competitors in each weight each week.

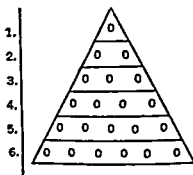
There are two common types of challenge tournaments, the ladder and the pyramid.

CHART 20
Challenge Tournaments

THE LADDER



THE PYRAMID



Contestants' names are inscribed on cards that can either be placed in slots or hung on hooks. Placing the players on the ladder or in the pyramid in the order in which they sign up will furnish an incentive for all who are interested to sign up quickly; it will encourage competitors to do what should be done. Positions may also be determined by the various players drawing numbers from a hat. Only if the time is short, is seeding to be recommended.

Rules governing play for the various forms will differ somewhat, and local factors will also modify them, but in general the following rules, with minor modifications, will suffice.

wins, positions remain as before, and defeated challenger may not challenge same player again for a week.

5. Challenges must be met in the order they are made.

6. After two contestants have played, they cannot play each other again until each has played once with another contestant.

7. In some challenge tournaments the rule exists that a player must defeat someone in his own horizontal row before he can challenge someone above him.

8. A defender must play within three days after receiving a challenge, provided he has not challenged above himself before receiving the challenge. If he has, he must meet the challenge within three days after his match, provided he is still in challenging range (three places) of the challenger. (As a substitute rule two challenge days may be selected each week, on one of which a player may challenge and on the other of which he must defend his position.)

9. There is no acceptable excuse, except inclement weather, for failure to play within the time limit stated in rule six; if defender cannot play within set limit, he must forfeit.

10. In case of difficulty concerning challenging and acceptance of challenges, set up a challenge board or require all challenges to be dated and handed to tournament manager, who will then post them.

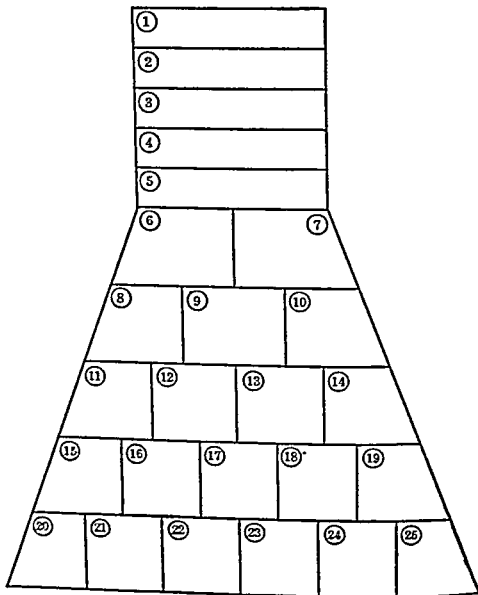
11. In the pyramid form a player may challenge any player in the rank above; that is, any player in rank five may challenge any player in rank four, who may in turn challenge any player in rank three, and so on.

12. The player at the top of the ladder or pyramid at the end of a specified period of time is the winner.

The Funnel Tournament. The funnel tournament is a combination of the ladder and challenge type tournaments. It works best with activities like handball, badminton, table tennis, and horseshoes. It is played off in a manner similar to a challenge tournament. A player must defeat someone in his own horizontal row before he can challenge into the next row. The top five positions are played as a ladder tournament.

The Tombstone Tournament. This is not a widely known tournament yet it has been used very effectively for group and individual competition. It involves a cumulative score, and the person or team who accumulates the best record over a specified period of time or who achieves a predetermined goal in the shortest time is the winner. For example, in swimming, each entrant indicates on a chart the distance he has swum each day. At the end of the stipulated period of time the contestant who has swum the greatest distance is the winner. If the distance is established, such as 100 miles, the

CHART 21
Funnel Tournament



winner would be the individual who first negotiated this distance. A chart such as the following should be used to record the performance in this type of tournament.

100 MILE SWIM (8800 POOL LENGTHS)*

	June 1		June 2		June 3		June 4		June 5	
Entries	Daily Record	Total Score	Daily Record	Total Score	Daily Record	Total Score	Daily Record	Total Score	Daily Record	Total Score
Jones, H.	44	5068	66	5134	22	5156				
Henry, B.	60	4896	60	4956	88	5044				
Brown, W.										
Marsh, M.										

* NOTE. Scores are recorded in pool lengths.

The above procedure may be used for competitions in hiking, chinning (one trial per day), pushups, situps, distance running, broad jumping, shot-putting, football punt for distance, and many similar events. For example, in basketball free throwing, it could be specified that each man was to take 25 throws each day. At the end of a month (or some other specified period) the player who has made the greatest number of baskets is the winner. In horseshoes, each player might play three games every day and record the total ringers made. After a definite number of rounds, the player with the most ringers is the winner. In archery each player might keep his daily score, and the winner would be that contestant who had accumulated the greatest number of points by a certain date.

In such events as the shot-put, broad jump, and football punt each player may be given three or five trials, counting only his best performance. Additional practice each day is encouraged.

In all these events it is obvious that all competitors should compete under the same rules and conditions. When this type of tournament is conducted among widely separated units, it is necessary to select events which are little affected by varying weather conditions and facilities. The progress of the tournament in such a situation

is made known to the various competitors either by telephone or mail.

The tombstone tournament may be used for group as well as individual competition. When the number of competitors in each group is the same, the group total may be computed each day until the end of the tournament. For example, to determine the winner in the standing broad jump each competitor would jump five times each day and count his best jump. If all the competitive groups were of the same size, the total distance jumped each day could be computed. At the end of the tournament, the group which had jumped the greatest distance would be the winner.

If the groups are not exactly the same size, it is necessary to obtain group averages. The group average would be scored every day, and the group with the greatest total at a set date would be the winner.

Point Systems. Intramural point systems are used to determine the group of individuals who performed most or best or both throughout the entire year. Such scoring plans are very valuable in stimulating and maintaining interest in intramural activities for the entire year. Many organizations and individuals are inclined to enter only those activities in which they are proficient. A point system, however, encourages them to engage in a wide variety of activities. The group influences all its members to participate, and, incidentally, those who most need big-muscle play activity are persuaded to enter into various sports. Many students get their first experience with different activities in this manner. With individual and group point systems operating, the whole participation in the program becomes less haphazard and sporadic. Scoring plans will function effectively in both college and high school intramurals.

Group point systems. There are many different types of group scoring plans. The Illinois plan is particularly noteworthy. All of the activities are divided into three divisions:

<i>Division I</i>	<i>Division II</i>	<i>Division III</i>
Soccer	Track	Tennis
Volleyball	Swimming	Wrestling
Baseball	Cross-country	Boxing
Playground Ball		Horseshoes
Water Polo		Free Throwing
Bowling		Golf
		Handball

Achievement points are awarded as follows :

Division I

- (a) Five points for every contest won.
- (b) One point for standing at end of the league season; that is, one point for last place, etc., and leading team is given the number of points according to the number of places in the league.
- (c) Twenty-five points for winning organized house championship.
- (d) In case of a tie game, each team is given one half of the number of points it might have won.

Division II

- (a) Each team will be awarded the total number of points won in an authorized meet.
- (b) Ten additional points will be awarded the team winning the championship of each meet.

Division III

- (a) One point will be awarded for winning a match or contest in tennis singles, handball singles, boxing, wrestling, horseshoes.
- (b) Two points will be awarded for winning a match in tennis doubles, handball doubles, or golf.
- (c) Five points shall be awarded for winning the championship in each sport in the division.

In the event that several teams are tied for one place at the end of the season in Division I sports, the points for tied places shall be evenly divided between the tied teams. If a team forfeits a game to an opponent, it shall have the number of points deducted that it would have received had the game or contest been won. If two teams have the same number of points at the end of the intramural season, the trophies shall be awarded to the organization having the highest scholastic average.

Whenever the number of competing units is small, each team may be awarded points according to the order in which it finishes in each sport. For example, in interclass competition, the team winning the league may be awarded eight points; second, six points; third, four points; and fourth, two points. The major sports are usually given more points than the minor sports.

Some departments grant the various organizations points for varsity letter men, squad men, and freshmen squad members. The justification for doing this is that some groups will prevail upon their members to confine their activities to intramural rather than varsity or freshman competition. Some departments deduct points

for poor sportsmanship. Scholarship is granted points in a few intramural departments:

Transylvania College has a unique scoring system. It is entirely individual and organizations get their points by adding together all the points of each person belonging to the group. For scoring there are three classifications, namely, team sports, intermediate sports (tennis, badminton, handball, and the like), and individual sports (table tennis, horseshoes, free throwing, and so forth):

1. *Points for team sports:*

(a) Participation at least two minutes.....	6
(b) Winning game	1
2. *Points for intermediate sports:*

(a) Participation in each event or match.....	4
(b) Each victory	2
(c) Winning championship.....	10
(d) Second place in tournament.....	8
(e) Third place in tournament.....	5
3. *Points for individual sports:*

(a) Participation in each contest.....	2
(b) Winning each match.....	2
(c) Winning championship.....	5
(d) Second place in tournament.....	3
(e) Third place in tournament.....	1

An interesting group scoring plan is employed at Ottawa University.

1. *Team sports:*

The number of players required to make up a team is multiplied by three for each win and by one for each loss. The points for a tie game are determined by adding a win and a loss and dividing by two.

Example:

Points for each game played

	<i>Won</i>	<i>Lost</i>	<i>Tie</i>
Basketball.....	15	5	10
Volleyball :.....	18	6	12

Thus, a basketball team which won 10 games, lost 4, and tied 2 would accumulate a total of 190 points.

2. *Tournaments*

	<i>Points</i>
(a) Participation in doubles.....	1
(b) Participation in singles	1
(c) Each victory (doubles or singles).....	2

(d) Loss	1
(e) Championship	5
(f) Second place	3
(g) Quarter-finalists	1
3. <i>Meets</i>	
(a) Participation in each event	1
(b) First place in each event	5
(c) Second place in each event	3
(d) Third place in each event	1
4. <i>Championship</i>	
A championship in any team sport or meet will score 25 points for the championship team.	

Individual point systems. Individual point systems are similar to group scoring plans. Every student has the opportunity of competing for individual honors. A simple method of scoring individual points is as follows:

1. Award five points to each player for every team victory in which he participated.
2. Award one point for competing in and not winning a team sport.
3. Award five points for each individual or doubles victory in tennis, handball, golf, horseshoes, boxing, wrestling, or foul shooting.
4. Award one point for competing in and not winning in the above sports.
5. Award each man the total number of points he won in a track, cross-country, or swimming meet.

Some departments grant points for varsity letters or squad membership. Sportsmanship and scholarship are also frequently rewarded by intramural points. There is a movement in high schools to include a large number of factors, such as participation in school activities, hygienic habits, sportsmanship, physical fitness tests, and the like, in determining the individual winner.

The individual point system has probably received more emphasis in the girls' intramural program than in that of the boys'. It has been especially popular in the high schools where it is usually fostered by the athletic associations. In addition to being awarded points for participation in all of the physical education activities the girls may also be granted points for health, posture, sportsmanship, and proficiency in the elements of various sports. The aim of such systems is to encourage all-round athletic ability. When the

girl has accumulated a certain number of points she is rewarded with an award of some kind, a letter, emblem, pin, sweater, or blanket.

A point system can be of value in stimulating participation in a wide variety of sports. It loses its value when it becomes too complicated or replaces intrinsic interest in athletics. The following point system, which is in operation at Barnard College, is a simple, effective one:¹¹

Honors shall be awarded to outstanding seniors in recognition of their participation in athletics, and contribution to the Athletic Association throughout their college course. These shall be awarded as follows:

CLASS A—GOLD A.A. PIN

Requirements

1. Very highest degree of versatility, proficiency, and leadership in athletics. Health and academic standards are automatically included in this, for a girl should not take part in a sport unless she meets the necessary health and academic requirements.

2. Definite contributions to A.A. other than participation in sports—as a manager, officer, committee member or the like.

3. Dependability and regularity of participation.

4. Habitual good posture. A girl receiving the Class A award should be of All Star standard in several sports and would have shown a contributive interest in A.A. activities during her college career.

CLASS B—SILVER A.A. PIN

Requirements

The same basis as for Class A, but lower standards of skill, versatility, and leadership.

CLASS C—BRONZE A.A. PIN

Requirements

The same basis as for Class A and B, but lower standards of skill and less emphasis on versatility and leadership.

Intramural Trends. In the postwar era many colleges and universities extended their intramural programs in response to the unprecedented demands brought about by the greatly expanded student bodies. Many new activities made their appearance. In addition to the traditional sports, such activities as archery, lawn bowling, ice skating, ice hockey, skiing, bicycling, crew, hiking, two-man

volleyball, lacrosse, shuffleboard, weight-lifting, codeball, aerial darts, and rugby football were being included in intramural programs.

Intramural departments in many institutions have definitely extended the scope of their services. The concept of intramurals has broadened and many programs have taken on a definite recreational aspect by providing competition in billiards, pool, bridge, chess, rifle shooting, roller skating, croquet, and dart baseball. Coeducational recreation is organized and conducted by some intramural departments for veterans and their families. Many intramural directors have assumed the responsibility for the informal, unorganized athletic competition in their schools and have developed and expanded these opportunities. Special efforts are made in a number of colleges and universities to bring faculty members into the intramural program.

Sports clubs. There has been a considerable development of sports clubs in colleges and universities since the war. These clubs are usually organized by groups interested in recreational sports, such as tennis, badminton, skiing, table tennis, archery, weight-lifting, handball, and squash. At times these clubs are coeducational. In most cases they are organized and sponsored by the intramural department. These organizations usually have a constitution and officers. It is quite common for these clubs to compete in municipal and intercity leagues, as well as with other colleges and universities. Expenses of such competition are borne by the organization members. A limitation is usually placed on the number of outside contests. A common requirement is that a faculty member accompany the club team on all trips.

Informal athletic competition. Intramural directors have been giving increased attention to the spontaneous, informal athletic competition which exists in practically all institutions. There are always students who are anxious to play when the facilities and equipment are available. By setting facilities aside for such competition and publicizing the opportunity, many more students can be brought into such competition. The intramural department can extend this program by providing a match-making service for all sports. With such an arrangement any student could indicate the sports he would like to play and the time he has available. The amount of participation and the number of participants justifies the effort of the intramural department to promote this informal competition.

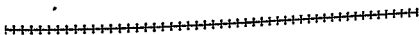
Faculty recreation. Some intramural departments have assumed the responsibility for promoting faculty recreation. The faculty has great need for recreational activities, and some provision should be made for those who desire to play. The intramural department is the logical agency to assume responsibility for conducting faculty recreation.

Faculty leagues and faculty tournaments can be conducted in institutions with large faculties. In the smaller colleges and high schools, the best that can be done for the faculty members is to set aside a regular period for them and provide the necessary facilities and equipment. The intramural director or the staff member in charge of faculty recreation should keep the faculty constantly informed and encourage them to use all the recreational opportunities which the department has available.

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Student Leaders in Physical Education



Educational Values of Student Leadership. Ours is a society in which each member is granted the right to lead in any line of endeavor for which he can prepare himself. We do not select certain classes as the ruling or leading groups and arbitrarily relegate others to the less desirable positions. We believe in giving and taking, in following in some aspects of life while leading in others.

Modern educational philosophy accepts and sponsors the proposition that we learn to do by doing; that is, that the actual practice or living out an experience tends to establish it much better than just hearing or reading about it could possibly do. If the schools are to prepare students to live enriched lives during both school life and adult life, many opportunities must be provided for practice of the elements of successful living. One of these elements, certainly, is leadership, around which can be developed co-operation, loyalty, sociability, and many other desirable social qualities. Few, if any, other school subjects provide the number of leadership opportunities that are to be found in physical education. The instructor who does not take advantage of the outstanding opportunities offered is failing to make use of the possibilities at his command; he is not putting to good use the talents that have been intrusted to him by the community in which he teaches. The use of student leaders does not provide an opportunity for the instructor to rest while the students do his work; instead, it provides a more complete means of educating through physical education, since it permits the students to share in various aspects of leadership which the instructor directs.

Student Leaders in Class Work. Since practically all students in the school are members of physical education classes for at least a part of their school career, the regular class work offers an opportunity to provide some type of leadership training for a large percentage of the students. The principles and procedures are essentially the same in junior high school, senior high school, and college. They can be applied below junior high school, but this involves more difficulties. Some minor modifications will need to be made at the various age levels, for the two sexes, and for different types of activity.

A specific class will be considered. In discussing the problem, the following assumptions are made: (1) That the class is composed of 45 freshman college men; (2) that grades are given for the course in physical education; (3) that a variety of activities (speedball, softball, volleyball, formal work, and games of lower organization) are included; and (4) that the system of student leaders is being introduced for the first time in the school under consideration. Necessary modifications can be made in applying the following material to the other age, sex, and activity groups.

Presenting the plan. This should be done at the first meeting of the class. Some time might well be spent in pointing out the values and opportunities this type of procedure has for the various class members. The general setup and procedure of the plan should be explained, and in this connection the authority and responsibility of a leader should be clearly designated. As a means of overcoming the possible objection that one student should not have the right to tell another what to do, it should be explained that there can be no leaders unless there are followers; and that, in order to have followers when one's turn comes to lead, it is only fair that he serve as a follower for the other fellow's leadership.

Opportunities to lead. There are enough different leadership opportunities in a class of this type that each student should be able to find something in which he can lead reasonably well. Some of those opportunities are listed and discussed in brief:

1. *Serving as a leader of squad or class group.* There can be, quite conveniently, four or five such leaders in a class of this size. This is one of the better leadership possibilities, for students in this position take charge of their group, under the instructor's direction, for many of the activities.

2. *Membership on rules committees.* The chairmanship of this committee is an important position. These students present their recommendations to the class concerning local rules interpretation, ground rules for obstacles in the playing area, and matters of that type. The chairman presides during discussion and voting on proposed local rules and alterations. This committee serves as a standing committee to whom rule interpretation problems can be referred during the term. Three to five members are sufficient.

3. *Leader of warming-up exercises.* This should be passed around so that several class members have the chance to lead the group. These boys must display enthusiasm and assurances tempered with friendliness.

4. *Stunt leader.* One boy for each piece of apparatus upon which stunts are to be performed. He should be chosen chiefly because of his ability to do the stunts.

5. *Officials.* A class of this type should provide its own officials for the games that are to be played. Some of the better boys can act as chief officials and those less experienced as assistants. These boys should be granted the customary authority due officials of the game concerned.

6. *Membership on equipment and grounds committee.* The activity area should be in condition to use, but it should be checked by someone to be sure that it is. In softball the bases may need to be placed and taken up later; in volleyball the nets may need to be put up, and in practically every sport the equipment needs to be brought out before class and returned after class. This committee of five members takes care of the above and similar duties.

7. *Leader for games of lower organization.* Every student in the class should have his turn at presenting a game of this type and directing the remainder of the class in it.

8. *Captain of all-star team.* Two players can serve in this capacity for each sport. The members, elected by their classmates on the all-star team for the exhibition game at the end of the portion of term assigned to the sport in question, will elect their own captains.

Methods of selecting leaders. In most cases the advantages of participation will be distributed more evenly, and the whole plan will work out more smoothly, if the instructor appoints leaders and thus apportions opportunities. This is particularly true concerning officials, committee members, leaders for warming-up exercises and for games of lower organization. However, group leaders should be consulted or given the right to appoint stunt leaders from time to time.

The matter of selecting group leaders presents a somewhat different problem, for these boys must conduct and manage their groups during a large portion of the class time. They must be the type that

others will follow readily or the system will not function properly. For the first semester there will be but one third to two fifths of a normal class that can serve creditably as group leaders, and those are the boys who should act in that capacity. Later, many more can learn the essential techniques. At the first meeting of the class the instructor should appoint leaders to serve for about three weeks until the class members have an opportunity to know one another. It should be announced that these leaders are to serve three weeks. If the instructor knows few or none of the students, he should still appoint his first group of leaders at about the end of the first meeting. This can be done on the basis of size, general appearance, apparent confidence, extrovertive tendencies shown by speaking up when the opportunity is offered, and on the basis of hunches. On these bases some few will be appointed who do not possess adequate qualifications, but the same would be true if the appointments were made a few meetings later. There is no value in hesitating, for all are new, and a weak leader will probably get along better at first while all are learning the routine than he would later when the routine is established. When the three weeks are up, the class members should elect their leaders for the next division of time—probably five or six weeks. All class members except the first group leaders are eligible. Each member should vote for as many boys as there are to be leaders. The old leaders should count the votes in the presence of the instructor and announce only the highest candidates. If five leaders are to be elected, the five highest become group leaders for the next period. At the end of their service period others are elected as above, with only those who have not served as group leaders eligible for election. The class members can be trusted to elect only those whom they consider leaders, since the weight of group opinion will overbalance a few votes for personal friends. Those selected by the class are those whom the class will follow.

Methods of guiding leaders. This can be done in part by means of general instructions to all concerning the responsibilities and techniques of leadership, but it is done chiefly through leaders' conferences with the instructor. These may be group or individual conferences. For new leaders there should be group conferences at which the specific duties to be performed are discussed, additional suggestions are made, and questions are answered. As the leaders

gain experience, the conferences should become less frequent and more individual in nature. A definite effort must be made to help the leader who needs help, but those who are having no difficulties need not be included in the later conferences.

Method of selecting group. Each leader should have the opportunity to choose his group. This should not be done in the presence of the rest of the class members, except for the first time, when the members do not know each other's abilities. Since the purpose here is to develop leadership instead of inferiority complexes, the poorer performers must be spared the depressing effect of being chosen along toward the last. They need to have their confidence built up, not destroyed by being made to feel that they are the least desirable candidates. Except as stated above, the following method of selection is recommended. All class members' names except those choosing are written on the board. The right to choose first, second, third, and fourth (assuming four leaders) is determined by lot. On the second round the order is reversed, and he who chose fourth gets the chance to choose fifth; he who chose third chooses sixth; he who chose second chooses seventh; and he who chose first chooses eighth and ninth. This method is followed in order to provide for more equal competition. These are the choices granted each leader:

<i>First</i>	1	8	9	16	17	24	25	32	33	40	41
<i>Second</i>	2	7	10	15	18	23	26	31	34	39	42
<i>Third</i>	3	6	11	14	19	22	27	30	35	38	43
<i>Fourth</i>	4	5	12	13	20	21	28	29	36	37	44 45

As a student is chosen, his name is marked off the board and placed on the list of the man who chose him. The teams should be posted on the bulletin board with the names arranged in alphabetical order; then none will be reminded that he was chosen last or next to last.

Each new group of leaders will choose their squads from the class roll. This will tend to place the men each leader wants on his squad and give each class member a chance to become better acquainted with a larger percentage of the class.

Class control under leaders. Insofar as possible each leader should control and conduct the activities of his group. Only in extreme circumstances should the instructor step in and take charge of a group for control purposes, for when he does that he is destroying the confidence of the leader and the respect of his group for him.

part of the discussion of intramural athletics, it has been presented more fully in Chapter 9.

Student Leaders in Varsity Athletics. Interscholastic and intercollegiate athletics provide two distinct types of student leadership opportunities: those delegated to the students selected to direct their respective teams in action and those provided for managers and assistants. Captains of the various teams and other specific team generals, such as the quarterback in football, the catcher in baseball, and the coxswain in crew, are the leaders of the first type. The captains may be elected by the letter winners of the previous year or appointed by the coach for a season or for a single contest. Many coaches prefer to have the captain serve for a season, especially if there is one boy who is an outstanding leader, for this practice gives more stability to the team organization. If there is no boy who really stands out as a leader, the team may function as well or better with a different captain for each contest. If the practice of having a different captain for each contest prevails, the coach almost always appoints him. Specific team generals, other than captains, are appointed by the coach to fit the particular requirements of the position.

These positions of leadership in varsity athletics are some of the most desired and most valuable in the entire school. Consequently, it is not sound practice to permit one boy to serve as captain in two or three sports or for two years in one sport, since others should also have an opportunity to receive the benefits of this experience. It should also be remembered that student leaders should be under the direction of the coach. If there is any value in training and experience, the coach certainly is better qualified to direct than students are. If the coach cannot be trusted with matters of supervising leadership, the remedy does not lie in turning the responsibility over to students but rather in dismissing that coach and securing one who can take care of his normal responsibilities.

Opportunities for managers in varsity athletics. It is not the universal practice for schools to maintain a system of student athletic managers and assistants. In this day of keen athletic competition and scarcity of opportunities for athletes in colleges to work their way through school, some directors prefer to make legitimate jobs for athletes out of the duties that might otherwise be performed by student managers. In other cases where the demand for jobs is

not so strong and where other conditions favor student managers, the system may be in operation in institutions of higher education as well as in high schools. Whether the school is large or small, there are many opportunities for student managers to render service and gain experience. For example:

1. They can be of service to visiting teams by meeting them, providing them with information, showing them to their locker room, providing towels, practice balls, and other materials they may need, and by seeing that their room is locked and unlocked when it should be.

2. They can be of service to officials by meeting them, escorting them to their dressing room, furnishing towels and other materials they may need, and in general treating them as guests.

3. They can help take care of the crowd by providing ushers, ticket sellers, and ticket takers; by putting up restraining fences, getting seats in position, and checking on their condition; by providing for entertainment during periods of intermission; and by regulating the purveyors of refreshments.

4. They can be of most service directly to the coach and the team.

(a) They can provide informational service for the coach through taking roll, collecting and filing information about competitors, keeping score, keeping time, making charts of successes and failures of team members in elements of the sport both in practice and in contests, and providing facts concerning condition and amount of equipment.

(b) They can care for the personal equipment of the players by issuing it, checking it in, storing it, having it cleaned, having it mended, and drying it after practice or games.

(c) They can care for general equipment and game accessories, such as marking chains, towels, balls, bats, coats, blankets, headgear, track equipment, whistles, horns, watches, tape measures, cords, first-aid materials, water, and scorebooks.

(d) They can assume responsibility for keeping facilities for practice and competition in shape. This will cover the supervision of such items as marking fields and tracks; brushing and rolling tracks, tennis courts, and ball diamonds; cutting grass; sprinkling grounds; caring for score boards; repairing broken goals, hurdles, and nets; placing movable equipment in position for use, and returning it after it has been used.

5. They can be of service to their successors by preparing and passing on to them a list of all duties to be performed. This list should also be kept on file for reference.

Selection and promotion of varsity managers. Interest, dependability, and willingness to work are essential characteristics of prospective

managers. The presence or absence of those qualities should be determined through a tryout period, during which time the candidates for assistant manager are given an opportunity to exercise authority and share responsibility concerning details of the work. Those who show promise during this period can be selected as assistant managers. Since many freshmen have some difficulty in passing their work and orientating themselves with the various aspects of school life without taking on the additional responsibility of trying out for an assistant managership, the right to try out should be withheld as a general rule until the sophomore year. However, if they try out as freshmen, they can serve as assistant managers as sophomores, and then one of the best ones can be selected to serve as manager during his junior and senior years. He would thus be an experienced manager in his senior year because of his having become familiar with his duties and responsibilities while a junior. After a manager had served for two years, the question of whether a junior or a senior should succeed him the following year might arise. If the plan called for a junior, then no member of the senior class would be eligible to become manager; nor would members of the sophomore class, for they would be seniors by the time the manager (a junior) has served his two years. On the other hand, if the plan called for a senior, then there could be but one year of service as manager. A sound plan seems to indicate exclusion of freshmen, permitting sophomores to try out for the assistant managerships, and selecting a senior manager from the juniors who have served as assistant managers. The number of assistant managers needed will depend on the size of the school and the prominence of varsity athletics.

The actual choice of assistant managers for the coming year should be made by the coach with the co-operation of the retiring manager and assistant managers. The assistant managers should be able to provide accurate information about the boys who assisted them while trying out. The manager for the ensuing year should be selected by the coach in co-operation with the retiring manager. Since it is the coach to whom all the managers and assistants are ultimately responsible, he should have the right to select the boys with whom he can work effectively.

The senior manager should have authority and responsibility for all the managerial work under the direction of the coach. He may

delegate to each assistant manager authority and responsibility for one sport. Each assistant manager will then delegate to those trying out under him the specific phases of the work for which they are to be held responsible. In some schools it may be a better plan for the manager to serve as general manager for all sports and then delegate to assistants one phase of the work for the year, such as caring for visiting teams, caring for officials, caring for the crowd, and caring for the personal equipment of the competitors, in which event, each assistant manager will assign details of his phase of the work to those trying out under his supervision.

Incentives in the form of numerals or letters of a type distinct from regular freshman and varsity awards are an integral part of a system of student managers. The bases for making such awards should be definitely established and made known to prospective managers.

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Physical Education Class Details

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This chapter deals predominantly with problems and details involved in conducting physical activity classes; however, some of the material applies equally well to academic classes, for the two types have much in common.

Planning. One of the most essential problems that is frequently overlooked is that of planning the daily program for each class. This should be done carefully. It is only the novice who needs to write out in detail the various aspects of the lesson to be taught, although capable, experienced teachers can usually profit by jotting down a few brief notes or key words as they think through the coming lesson. An excellent teacher can teach a good lesson on the spur of the moment but can do much better if the lesson is planned ahead. In planning the lesson, the instructor should include those activities and techniques which will provide a positive answer to the following questions:

1. *Does the whole lesson constitute a healthful procedure?*
 - (a) Is the area of action clean and sanitary?
 - (b) Is the temperature satisfactory?
 - (c) Are all given stimulating exercise?
 - (d) Are pupils kept from exercising too hard or too long?
 - (e) Are dangerous activities eliminated?
 - (f) Are pupils properly dressed for these activities?
2. *Does the activity fit the facilities?*
 - (a) Is there enough room?
 - (b) Are the supplies and equipment adequate and at hand?
 - (c) Are playing surfaces satisfactory for the activities?
3. *Is this plan educationally sound?*
 - (a) Is it interesting?
 - Is it seasonal?

Is it graded to the level of the students?

Does it involve natural racial activities in abundance?

- (b) Does it provide participation for each student for most of the period?
- (c) Are the students reasonably familiar with the rules and techniques of the activities considered?
- (d) Does it provide for competition and co-operation?
- (e) Does it fit in well with the lesson that has preceded it and the one that is to follow?
- (f) Are leadership opportunities for the students provided?
- (g) Do the various parts of the lesson integrate well—that is, can the students move from one part to the next with a minimum of re-arrangement of equipment and groups involved?

Taking Roll. There is no one method of roll taking that is superior to all others for all occasions; instead, there are several good methods commonly used. Still, some of those most generally employed have little to recommend them. Accuracy, speed, and freedom from additional expense are the three essentials of good roll taking. Student participation and learning to know the students by name are elements of some significance, but other phases of class activity contribute vastly more to these two than does roll taking. With this in mind the following common methods are listed, explained, and evaluated.

Recording visible numbers. The numbers are painted on the floor in one or two lines. The students are assigned numbers according to height, with the tall ones on the smaller numbers to the instructor's left as he faces the class; the shortest pupil is at the end of the line to the instructor's right on the largest assigned number. The instructor then writes on a small card the numbers that are not covered. These are later recorded in the class book. This is a good method if the class is to meet in the same place each time and the surface is such that the numbers may be placed there permanently. It is accurate and quick, but it does not provide for student participation or for acquainting the instructor with the student, and there is a small additional expense.

Recording by squads. The class is arranged according to height from right to left. The first six or eight men on the right constitute the first squad; the next six or eight constitute the next squad; and so on down the line. The names are placed in the class book in this order. A squad leader and an assistant squad leader are appointed or elected for each squad. Numbers may be assigned to each member

of the squads. In taking roll, the instructor says "Squads report!" The squad leaders take one step forward in order and report any absences in their respective squads. The instructor notes on a small card the absent numbers or names and later transfers them to the class book. This method is acceptable, although usually less accurate and slightly more time consuming than the other recommended methods. It involves no additional expense, provides for student participation and can be used on the playground or in the gymnasium since it is not restricted to any one place.

Recording absent numbers. In this method the students are lined up according to height as above, and each pupil is assigned a number, the tallest receiving number one and the shortest the last number assigned. At the command "For taking roll, count!" the pupils call off their numbers in order. Supposing number eight is absent, then number nine calls out, "eight absent, nine." The instructor watches the class during the count and writes the absent numbers on a small card. The record is transferred to the class book later. This is an excellent method of taking roll; it is accurate, quick, provides for student participation, can be used anywhere, and involves no extra cost. In this method, as in others, it may be well to read the numbers marked absent as a means of checking any error the instructor may have made in recording the numbers.

Calling the roll by names. As the heading implies, the names are read from the class book, and each student answers when his name is called. For general purposes throughout a term this is a very poor method, except in those cases where the instructor can take roll while the class is warming up. It takes too much time and is not outstandingly accurate; however, it does aid in associating faces with names, provides for some student participation, and involves no extra cost. As a means of learning to pronounce the names and of becoming partially acquainted with the students, it serves a useful purpose for the first few meetings of the class each term. After that it should be replaced by some more rapid method.

Alphabetical plan. The class lines up in alphabetical order. Roll is then taken by names or numbers. After roll has been taken it is necessary for the class to reassemble according to height. This plan requires too much time and provides for added confusion through the necessity of reassembling; hence, it is not to be recommended.

Use of tag board. This takes different forms, but in general each student is given a tag numbered to correspond to its peg on the board. Roll is checked according to the tags that remain or are missing as the case may be. This method is not to be recommended, for it is not particularly accurate or time saving, and additional expense is involved. If the students keep their tags a part of the time, some are apt to be lost; and if they do not keep them, there is little excuse for providing them.

Dress and Inspection. A change of clothes for activity periods is not advisable for children in the lower grades in most situations, for the allotted time is too short, the "gym outfit" is hard to provide in many cases, and younger children perspire less freely than do older ones who engage in more sustained exercise. In the more advanced school grades, where uniforms are required, it is the instructor's responsibility to see that they are suited to the activity and that they are kept clean. A class looks much better, morale is easier to maintain, and differences in social status are minimized, if all members are dressed in the same type of uniform; consequently, a common type is recommended. If all are not required to wear the same general type, the instructor should make known the specifications of an acceptable uniform and allow no exception to those specifications.

On the high school level the inspection for cleanliness should be periodic, systematic, and quickly done. If the basket system is used for storing the activity clothes when not in use, a check of the baskets on the days designated as wash days for all pupils will reveal those outfits that have not been taken home. If checking is done in class, the instructor can do this quickly after roll has been taken, noting clothes that need to be washed. Friday, or the last activity class meeting of the week, is a good day for this. Then a further check on Monday, or the next activity class meeting day, will reveal how many have cleaned their clothes. As implied above, an occasional general wash day for high school students for all uniforms should be designated. Enforceable penalties, known beforehand to the students, will need to be applied to those who fail to meet established standards of cleanliness. Rigid enforcement rather than severity of penalties is to be recommended. In college a clean uniform should be required.

Absence and Tardiness. The same general rules that apply to absence and tardiness in other classes in the school should apply to activity classes in physical education. If there are no school rules in regard to these matters, the physical education department should make its own rules. They should be few in number, not extremely severe, but rigidly enforced. Each student should be informed at the beginning of the term or semester concerning attendance regulations and, in addition, reminded once or twice during the term. A minimum of scolding and exhorting coupled with a maximum of enforcing will soon establish ample respect for regulations. If it is generally known that violations cannot be "fixed up," there will be fewer violations. The instructor's time should be given to those who comply with the regulations rather than wasted in an effort to grant special privileges to those who do not comply. The student who misses class just because he chooses to do so is losing that opportunity and should not be allowed to recall it.

Even though it is wise practice to reduce make-up work to the very minimum, justice served better by providing make-up opportunities for those who merit consideration because of entirely excusable violations. In providing these opportunities, the educational purposes and objectives of the entire program should be kept in mind. The faulty practice of permitting absences from college classes to be made up at the rate of three or four a day during the last week in order to complete the work is to be discouraged. Intensive attendance during the last week of a term should not be allowed to replace the cumulative benefits of a normal semester's work. Regulations should provide for only a limited number of make-up periods during any week, and all students should know how many are permitted. There is little to recommend the practice of requiring two make-up periods for each absence; "one for one" is a good rule. Too many absences should automatically fail a student, even though he has a good excuse, for no one is expert enough to do passing work when he is not there. There is considerable justification in college for the practice of allowing two or three absences per semester without lowering the student's grade, provided the absences do not occur just before or just after vacation. This makes it possible for the conscientious student who is indisposed because of a severe cold or some other ailment to refrain from class attendance and remain

in bed or in his room without losing grade points. It does not provide sufficient opportunity for the malingerer to abuse the privilege.

Credit and Grades. It was pointed out in Chapter 4 that a department can function much more efficiently if regular grades are given for activity class work than if only a pointless "Cr." is given. The actual grade given to a class member should be awarded on an educational basis; that is, the student who most nearly attains the student attainment objectives should be given the best grade. These objectives can be grouped conveniently under the three major aspects of education and, hence, of physical education: the *mental*, the *social*, and the *physical*. Since physical education is education *by means of* or predominantly through the physical, rather than the education *of* the physical, grades given should not be based on physical skills and abilities alone but on the other two major aspects of education as well. The bases upon which grades are awarded reflect the instructor's real objectives of physical education for class work. If one grades largely on behavior, there is little use in denying that the attainment of discipline is the major objective; if one grades largely on strength, then the attainment of strength is the major objective; if one grades largely on skills, then the major objective is the development of skills; if one grades largely on knowledge of rules and techniques, then the attainment of this knowledge is the major objective; but, if one grades on the various social, mental, and physical aspects combined, then one is pursuing well-rounded objectives of physical education. It is useless to claim one set of objectives and operate on the basis of another, for the ones upon which one operates are the true objectives. The grade should represent degree of attainment of the objectives which have been set up for this phase of the work. It is only reasonable to grade upon the basis of what is taught in class.

With the above considerations well in mind a method of grading for a class in games, where leadership opportunities are stressed, is presented. With minor modifications this same method will apply equally well to other activities and activity classes.

The actual percentage of the final grade contributed by each aspect of the work will vary according to the individual instructor's philosophy. The significant points to stress are that all aspects are included and that no one is weighted so heavily or so lightly that it is of dominant significance or of practically no significance in determining the grade. The pupils should be informed concerning the method of grading, and they should have the opportunity to check with the instructor from time to time on the progress they are making.

Just how does this operate? At the first class meeting the instructor explains the purpose of the class and stresses the objectives to be pursued. He groups them under the three headings presented above and explains in some detail the items that are to be included under each main heading. Under "attainment in physical aspects" he lists skills in the various games, scores on specific ability tests of speed, strength, endurance, and co-ordination, if any are to be given, and other predominantly physical aspects of the class work. Under "attainment in social aspects" he lists, among others, leadership, co-operation, enthusiasm, cleanliness, self-control, sportsmanship, efficiency, and sociability. Under "attainment in mental aspects" he lists knowledge of rules, techniques, and game situations. As an aid in making clear the method of grading, he mentions specific acts or attitudes and shows how they contribute to or detract from attainment in their specific areas.

When class activities start, during or after each class meeting the instructor checks under its appropriate heading any particularly worthy or unworthy performance on the part of any individual. The record for one class period might include checks because of dirty clothes for one pupil, marked enthusiasm for another, exceptionally good performance for another, lack of co-operation for another, poor choice of a game element for another, and excellent leadership for another. Through the accumulation of these checks, by the end of the term some students will have many favorable marks in all three major aspects; others in some aspect; others will have few or no marks of any kind; and still others will have a number of unfavorable marks. Only the noticeable variants from the general average are notated with favorable or unfavorable checks. The great mass of average students have practically clear records. The scoring is done by code in such a way that it takes little time or space to keep

the record. A section of the record book at the end of the term based on daily observation may appear like this:

J.J.J.	(Phys.	L	L	L		L	L
	(Soc.		7			L	
	(Ment.	L				L	
R.E.J.	(Phys.						
	(Soc.	L			L		L
	(Ment.		L			L	
L.L.K.	(Phys.				L		
	(Soc.						
	(Ment.				7		

L = favorable) The comparative size indicates the strength of
 7 = unfavorable) the rating.

This record of the instructor's daily observation, then, indicates that pupil J.J.J. is very strong in attainment of the physical aspects, average in attainment of the social aspects, and slightly above average in the attainment of the mental aspects; that pupil R.E.J. is average in attainment of the physical aspects, well above average in attainment of the social aspects, and above average in attainment of the mental aspects; and that pupil L.L.K. is practically average in all three aspects. At the end of the semester, the accumulated daily results can be totaled quickly. These results can be supplemented by scores made on tests of physical skills and abilities; examinations on rules and game techniques, and rankings given by class members. These rankings are made without causing the students to realize that they are actually ranking themselves, in certain phases of the work. For example, when student leaders are elected a count of the votes each one gets for leader will give a fair estimate from the class of each pupil's leadership ranking by his fellows. Let us suppose five leaders are elected and each pupil votes for his five candidates. Just the five highest are leaders for the period of time involved, but the instructor can very easily keep a record of the leadership votes each pupil gets. On another occasion it may be stimulating to present a game for some interested groups, or as a final performance in some sport. By having each student vote for enough players for one team and then selecting two teams on the basis of the highest total votes, the better players can

be selected for this exhibition game. Here again, the instructor can keep a record of votes that each member gets, a record which represents the composite class judgment of each player's ability in that game or sport. Other opportunities of this type will present themselves to the instructor who wishes to temper his estimates of the worth of each pupil's work with the results of student estimates. The final grade will then include:

1. *Attainment in physical aspects:*
 - (a) As measured by daily observation.
 - (b) As measured by tests of skills and abilities.
 - (c) As measured by estimates of fellow students.
2. *Attainment in social aspects:*
 - (a) As measured by daily observation.
 - (b) As measured by ratings of fellow students.
3. *Attainment of mental aspects:*
 - (a) As measured by daily observation.
 - (b) As measured by tests on rules and techniques.

Concerning each aspect the instructor's daily estimate is very important. It is to a certain extent subjective, but so is every other test. Many studies have been made which show that there is little uniformity in marks given by competent teachers on written examinations in the academic school subjects. A graduate class in education, composed largely of principals, superintendents, and teachers, was given mimeographed copies of a student's arithmetic paper and asked to grade the paper. Out of this class of about seventy schoolmen the grades given on the identical mathematics paper varied from "A" to "D," and mathematics is considered an exact science. Similar results have been found concerning grading of English themes and other phases of school work. This is not a plea for avoiding exact measurement but a contention that the instructor's daily observation can hardly be less exact than results measured by some accepted types of tests. Although dirty clothes are a relative matter, still the instructor knows when the pupil's clothes are dirty. He also knows whether a student is antagonistic, whether he has played a game exceptionally well, or whether he is chronically late to class. *If possible, measure objectively*; but in the event that this is not possible, accept the fact that many subjective measures are strikingly correct and use them. It is not possible to assign an index

number of 84 or 92 or 95 to represent the affection a young man may have for a young lady in whom he is greatly interested, but by the use of subjective measurements that are available it is evident to all who see him with her that he is madly in love with her. Since our objectives cover aspects for which objective measurements are not available we should include our best subjective measures with a clear conscience. The daily observation in class of the variants from the general mean of performance in the three significant aspects is presented as one of the best and most economical subjective measures available.

Excuses and Substitutes. Those in charge of physical education must present an interesting, worthwhile program in order to reduce to the very minimum the excuses from physical activity and substitutes for physical activity, for quite a number of students who are excused could enjoy it if they were interested enough to want to participate. Even after the expenditure of careful effort to provide an excellent program, there will be some few students who will try to avoid physical activity classes. Besides these, there will be a limited group of students who are not able to engage in regular class work. It is with these last two groups that we must deal concerning excuses and substitutions. It is very doubtful if anyone who is able to attend school should be excused from physical education because of some deformity, defect, or other physical handicap. Those who desire most to be excused from physical activity often need it most. Each individual's need should be met even if it be but to rest during the physical education period. However, facilities and staff are not always available to care for the few who require special treatment, and for that reason the best practical solution may be to excuse them from regular class meetings.

Excuses from regular class meetings should be based on the advice of a physician, the school physician if possible. If there is no school physician, it is best to have the examining physician fill out the school physical examination blank form, on which the specific weakness of the student is listed. This may be followed up by a conference with the physician in which he suggests types and amounts of activity that the individual may take without danger of harmful results. The physician should plan with the instructor for the student's benefit. In those cases where space and the instructor's time are available for corrective class work, this type of work, based on

individual diagnosis of each student's needs, should be substituted for the normal class work; in cases where space and time are not available, the student will need to be excused from regular meetings. But in the event he is excused, he should be assigned some type of substitute work that will enable him to improve his condition or at least prevent it from getting worse. The practice of assigning readings in hygiene to the frail and crippled individuals who are unable to do normal class work is to be discouraged. They need modified activity or relaxation, and reading health material does not fill their need. Quite often they should read less, not more, and the instructor who increases their load is burdening them rather than building them up. The physician may recommend gentle exercise in the open for the convalescent; arm exercises for the one who is crippled; hiking for another who lost his arms; and foot exercises for one who has painful arches. These can be done outside of class if need be and reports made to the instructor. It is as reasonable, and educationally as sound, to accept reports concerning these activities as it is to accept an outline of a book in fulfillment of the requirements in physical education. To summarize briefly: excuse only in extreme cases; when it is necessary to substitute outside work for regular class meetings, provide activities that will build up rather than those that will increase the burden of the handicapped student.

Arrangement of Materials. Adequate preparation for any class meeting includes the collecting and arranging of equipment and supplies so that they will be in a convenient position for class activities. Through poor management an appreciable amount of class time can be wasted in waiting for someone to get the key to open a cabinet, to go to the equipment room for balls or bats, to place apparatus in position where it can be used, to find bases for indoor ball, to move the piano, and to perform other acts of that type. The planned lesson enables the instructor to know what materials will be needed and where they should be placed before the class starts. It is good practice to have the class participate in moving and rearranging materials that need to be moved during the class period, but it is inexcusable practice to have most of the class wait while a few members run errands to collect materials that should have been collected ahead of class time. Insofar as class members are used in arranging equipment, they should be taught

methods of doing it with accuracy and dispatch. Unless they are taught satisfactory methods of procedure, they are apt to waste considerable time stumbling through tasks that should be routine. Considerable portions of the third, fourth, and fifth class meetings can well be devoted to establishing class routine, a part of which should include the handling, moving, and placing of materials.

Records. Only those records which are of use should be kept, for it is a waste of time to keep records for records' sake. Not infrequently, high schools and universities collect numerous measurements on students and then file the information away and forget about it, partially because there is not time to do anything with it and partially because those in charge do not know how to put it to any good use. In case of doubt a few clear records should be kept, and kept accurately and well. They should be kept on conveniently arranged forms in files or books, where they will remain clean, safe, and readily available. The following records should be kept as an aid in promoting efficient class functioning.

1. *Health record.* This permanent record might well have four aspects:
 - (a) Health examinations. This record should contain notations concerning defects or weaknesses of the student.
 - (b) Follow up. This includes notations concerning what has been done to care for defects noted above.
 - (c) Health inspection. A temporary record of unfavorable findings during daily inspection.
 - (d) Physician's recommendation. This applies to those cases for whom the physician recommends certain types and amounts of activity.
2. *Attendance record.* This should include absences and tardiness and is kept in the class grade book.
3. *Record of grades given.* This is also kept in the grade book and shows final grade given as well as the periodic grades (includes scores made on tests), which are combined to make up the final grade.
4. *Record of equipment issued to class.*
5. *Record of locker or basket assignments.* This should also include combinations to lockers if combination locks are used.
6. *Teacher's informational record.* This is a record for the teacher's benefit which should include a record of activities and techniques employed for the semester, with notations concerning those which were particularly successful and those which were not satisfactory. It is a very brief log of the term's work that is to serve as a guide for the next term when the work will be repeated.
7. *Record of material and equipment needs.*

Reports Made by the Instructor. It is essential that the administrative heads of any school know what is happening throughout their system during the school year and that they have a summary record of the significant happenings when the year is over. In order that these facts may be available for the use of those in authority, the teacher must of necessity present reports containing the desired information. The number and extent of reports will vary with the individual schools involved; in general, the larger schools will require more reports than the smaller ones. A definite effort should be made to hold the number of reports to the very minimum, and only essential material should be included. All reports should be made accurately and on time. The fewer reports required the more time the instructor will have for each report.

Much time can be saved for the teacher as well as for the office force if appropriate blank forms are used. Only a minimum of writing should be required; whenever possible, a check or some simple code figure should be used. Orderly arrangement with main heads and a few subheads and sufficient space to avoid crowding save time for the instructor.

Good paper should be used for the permanent report blanks, but a comparatively inexpensive grade can be used for temporary routine forms.

The instructor should make the following reports:

1. *Health report.* This daily report includes information concerning those who are too ill to do regular work, for those who are injured, and any cases of contagious disease.

2. *Attendance report.* An hourly or daily report of absences and tardiness, depending on the size and organization of the school.

3. *Emergency report.* A report concerning any unexpected circumstance or happening, especially an accident, that markedly affects class functioning. This may appear on the same blank as the health report, since it is a daily report.

4. *Grade report.* This covers term or periodic grade as well as periodic failure report.

5. *Promotion report.* This is made at the end of the term.

6. *Annual report.* This covers activities, particularly successful techniques, budgetary estimates, number of children participating, summary of health program, suggestions for next year, and, in general, all significant phases of instructor's work in summary form. This report can serve as an important source of information for the press and the public as well as for the administrative officers of the school.

Handling the Class. There are a number of people meeting physical education classes today on the elementary, high school, and college levels who are not truly in charge of the classes they meet; in fact, no one is in charge of many of the classes. The pupils roam about more or less at will and respond with delayed reaction, if at all, to the requests of the individual nominally in charge. This is due in part to an academic philosophy which maintains that personality development requires abundant self-expression. The pendulum has swung from the formal, strict-obedience type of class to one in which there is extreme freedom of action. The latter, however, has been found to have as many weaknesses as the former. Today, perhaps, in most situations, the pendulum is swinging back toward a middle position which allows more natural activities but provides instructor direction and control. This is as it should be, for there is little use in having an instructor if the class does not respond to his wishes and plans. Student leadership and comparative freedom of action do not mean lack of instructor control, although they may indicate more remote control than is evident in strictly formal class procedure. Regulating by remote control is one of the more subtle and effective approaches in teaching activity classes; hence, it is to be recommended rather than condemned. The prime essential is that there be instructor control. Each individual has his own methods of gaining control, but there are certain fundamentals behind class control that are worth considering, especially for use in difficult situations. Despite the fact that numerous suggestions concerning methods of class control have been written, there are still those who have disciplinary trouble, and they will continue to be with us, but perhaps in reduced numbers because of helpful suggestions and new viewpoints presented from time to time. The following suggestions are presented as possible aids. The instructor should:

1. Gain self-control. The individual who can control his own emotions and actions in such a way that he appears calm when he needs to appear calm, enthusiastic when he needs to be enthusiastic, and who in general has mastery of himself is well on the way toward a position of leadership before a class or in society.
2. Believe and act as though he expected the class to respond according to his wishes; have confidence, or at least the appearance of confidence.
3. Meet the first challenge with determination. There are always some

pupils who will try out the new instructor. A victory in the first disciplinary encounter will forestall many other incipient control problems.

4. In case of doubt, say nothing. Many instructors have found that the use of words in handling matters of discipline follows the law of supply and demand—the more there are the less valuable each one becomes. Then too, silence is less liable to be misinterpreted than is an impromptu lecture on the behavior of some individual or group.

5. Remember that most of the class members want to obey most of the time and, consequently, reassure himself, when he begins to lose confidence, with the thought that the majority are in accord with him.

6. Know his subject well and thus avoid embarrassing mistakes which tend to disturb one's composure and destroy confidence.

7. Realize that pranks are not personal insults, and strive to treat them impersonally.

8. Be prompt and dependable and thus establish a routine which the class may expect. Uncertainty on the part of the pupils adds to the confusion and provides opportunities to cause trouble.

9. Develop a sense of humor; it will carry him through many difficulties.

In the class which starts with a short, formal routine the mechanics of arranging pupils in positions or providing for pupil movement and alignments in general must be understood if the instructor is to work efficiently. Enough formality to avoid confusion in class procedure is essential. Since it is during the first few periods that the mechanics of class movement and placement should be established, the following may well represent the activities for the first meeting on the gym floor or play area. It is assumed that there has been one meeting before this during which the course has been discussed.

When the class has collected on the activity area, it should be called together by blowing a whistle or by some other convenient means. Then the members should fall in in one or two lines and arrange themselves according to height, with the tallest to the right. Since it is a good plan to have them fall in at the same place each day, they should collect at the most convenient place the first day and be asked to assemble at the same place at future meetings. After adjustments have been made so that all are in their proper places, the position of attention should be explained and practiced several times (since this is an exact, formal procedure the U. S. Army form might well be used). Then they should be taught the instructor's method of doing right dress (as above, in the absence of any

good reason for another form, the U. S. Army form might be used). One should teach by demonstrating and explaining first and then have the students practice with corrections where needed. Then the method of taking roll should be explained, and permanent roll numbers should be assigned, after which, roll taking should be practiced several times. There are some who believe that the formality suggested above is excessive—they shudder at the thought of any command-response activity for fear that it will interfere with freedom of choice and action. Some additional formality is suggested here, however, on the assumption that it is time saving and that it is more acceptable than disorganized confusion. It is recommended for purposes of efficiency and dispatch. This is not suggested for small classes of a dozen students but for larger classes, which might well be limited to forty students, but which, in some cases, exceed one hundred. With the purpose in mind of moving organized groups about expeditiously, some instruction in facing forward marching, and halting might well be included in the first lesson.

Since each activity class period should provide stimulating exercise for all, and since class members need to get into condition as do varsity or intramural athletes, at least one third of this period should be used for more active conditioning work, which can be formal or informal according to the purposes of the class. Before dismissal the class should fall in, and roll should be taken to help establish assigned numbers and the roll-taking procedure.

During the next few meetings the amount of time spent on the mechanics of class movement and on the handling of equipment and supplies should be gradually diminished and the time spent in the activities proper gradually increased as the pupils get into better condition. It is good practice to start each class with a brief period of formal lining up, dressing, roll call, and inspection, even though the remainder of class procedure is to be predominantly informal. These first few minutes should be enthusiastic and snappy, stressing alertness and exactness. In the classes with informal opening activities there are about as many procedures as there are instructors. Small classes fit well into a pattern of this type. Greater reliance is placed on the students to warm up before vigorous activity starts, and roll is taken in a variety of ways.

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Budget Making and Finance

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Importance of Efficient Financial Management. The financial management of his department is one of the most important duties of the physical education administrator. Although the financial aspects of the service and intramural programs are not particularly difficult or time consuming, those of the interscholastic and intercollegiate athletic programs do entail considerable responsibility. Most physical education directors administer the interschool athletic programs and are therefore concerned with handling money, making all types of financial transactions, bookkeeping, and preparing budgets. In handling these financial matters, simple and effective procedures are available and should be used.

Any school official who receives and expends funds is expected to employ sound business methods. For him to do otherwise reflects adversely upon him. This situation prevails, regardless of the size of the institution or the amount of money involved. No teacher or administrator can afford to be careless or ignorant in handling public funds.

Another reason why efficient financial management is important is that maximum benefit must be secured from the revenue available. Most departments never have sufficient funds to provide all the desired services to students. Consequently, available resources must be wisely employed. Almost invariably those departments with the most serious financial problems use the most unbusinesslike procedures. This is particularly true of small high schools and colleges.

Despite the great importance of this phase of their duties, few directors are prepared for the efficient financial administration of the physical education department when they first undertake it. The great majority of administrators learn by the trial and error method.

Experience may be the best teacher; but it is an expensive teacher, particularly where finance is concerned. Large universities and colleges emphasize the importance of special training when they employ an expert to handle the business affairs of the intercollegiate athletic program. The director is frequently selected for his business ability. The professional physical education programs should make some provision to prepare physical educators for the financial responsibilities which they will encounter in their positions.

THE PHYSICAL EDUCATION BUDGET

In the great majority of schools the budget for the service and intramural programs is prepared separately from the budget for interschool athletics. In an extensive study Adams discovered that approximately 80 per cent of secondary schools followed the practice of having a separate budget for the athletic program.¹ When the physical education budget (including intramurals) is submitted separately from the budget for interschool athletics, it is much easier to prepare because it is not concerned with the estimation of income and it does not involve the amount or variety of expenditures. In such instances the physical education director's duties are not appreciably different from those of the head of the physics or chemistry department. The interschool athletic program is the factor which accentuates the financial responsibilities of physical education administrators.

Source of Financial Support. In most high schools and colleges and universities the usual practice is to finance the service and intramural programs from the institutional budget. The service program is considered a part of the curricular offerings and, as such, is almost invariably supported from the regular school funds. Similarly, the cost of facilities and personnel for intramural athletics is almost always carried in the institutional budget. Quite frequently, however, the equipment and operating expenses come from the interschool athletic funds. This situation should not prevail because intramural athletics are an integral part of the physical education

program and should be provided for all students as a desirable educational experience.

Steps in Preparing the Physical Education Budget. The major items involved in the separate physical education budget (including intramurals) are capital outlay, expendable equipment, and maintenance and repairs. These items should be included under these separate headings in the budget. The cost of capital equipment and maintenance and repairs is comparatively easy to estimate. Capital equipment includes all expenditures which increase the value of the school plant, such as additions of any kind to the grounds, buildings, or fixed equipment. A new backstop, tennis court, or shower room are examples of capital outlay. Maintenance and repair items include painting, refinishing, and repair of equipment.

The first step in determining the expendable equipment (balls, nets, shuttlecocks, bats, and the like) needed for the following year is to take an inventory of what is on hand. This should be done as late in the school year as possible because the equipment will continue in use until classes are terminated for the summer. Ordinarily, it will be necessary to take inventory three or four months before the end of the school year. In this case an estimate must be made of the amount of wear and tear of the equipment during the remainder of the school year. With experience this can be done quite accurately.

In making the inventory it is important to classify the condition of all items of equipment. Some equipment will be new or almost new; other equipment will be in moderate condition; some items will need repair; and others should be discarded. A careful inventory is of vital importance, since the request for new equipment is based upon it. It is not a responsibility to turn over to students, although students may assist with it.

The next step is to determine the total amount and type of equipment which will be needed during the next school year. Analysis of budgets for previous years will indicate the amount of equipment normally required. This amount can be used as the starting point for determining over-all requirements. Changes in the number of students, departmental policies, or the nature of the service and intramural programs will increase or decrease this amount. When the estimate of total equipment needed has been obtained, the

amount of new equipment to be ordered will be the difference between what is required and what is left over.

In making the estimate of what is needed the administrator should be certain to order an adequate amount. It is better to err on the side of too much rather than too little equipment. This does not suggest padding the budget. It does suggest liberal rather than ultra-conservative estimates. It is preferable to have a small amount of equipment left over at the end of the year rather than to run short.

After the budget has received the necessary approvals the equipment should be ordered. Practices vary in this regard. In some schools the physical education administrator is free to order whatever equipment he prefers so long as his total spending does not exceed the money allocated. In other schools bids from several merchandisers must be invited. In this case the administrator must prepare detailed specifications of what he wants. When equipment is purchased in this manner, frequently, the type of equipment received is not what was wanted. Generally, the responsibility is the administrator's because he did not prepare the specifications in sufficient detail.

In a department with several staff members it is advisable to solicit their advice before ordering new equipment. The different staff members may have had more experience with certain items of equipment than the administrator, and their recommendations may be very helpful.

THE ATHLETIC BUDGET

Support of Interscholastic Athletics. Interscholastic and inter-collegiate athletics are usually supported in part from the institutional budget and in part from gate receipts and other sources of income. Although most schools include the salaries of coaches from the regular institutional budget and provide for the maintenance and operation of the athletic facilities, few institutions go so far as to appropriate funds to meet the current expenses of the athletic program. Jenne, in a study of cities with populations over 100,000, found that 10 of 72 cities did this.⁸ In a study of 2,125 secondary schools, Hughes and Schooler discovered that only 15 per cent of the school

districts were moving toward complete financing of the athletic program from tax funds.³

Ideally, interschool athletics should be financed in the same way as any other school subject. The only justification for interscholastic and intercollegiate athletics is the significant educational experiences they provide. These experiences are so vital and important that they merit financial support from institutional funds. These values of athletics cannot be obtained if the program must be supported by gate receipts. Gate receipts and educational outcomes are incompatible objectives of interschool athletics. Experience has repeatedly demonstrated that athletics are conducted on a much higher plane if they derive their support from regular school funds.

The reason for the failure of many schools to finance athletics properly stems from the philosophy that only curricular activities are deserving of such support. Athletics originated as extracurricular activities and in many schools are still considered in that category. However, there is an increasing trend to regard athletics as an integral part of the school curriculum. In New York State, athletics by Board of Regents' action are a definite part of the physical education program of the schools and boards of education are empowered to provide financial assistance from regular school funds.

The practice of expecting interschool athletics to be largely self-supporting has led to most of the problems which have developed. The amount of gate receipts is largely dependent upon the success of the teams. The effort to produce winning teams often results in undesirable educational practices. Most of these are involved in getting superior athletes into school and in keeping them eligible to play. The athletic program can never be educational in a desirable sense so long as it remains commercial.

The following statement by Hughes and French relates to this matter:⁴

So long as the program of competitive sports must depend for its very existence upon the direct financial support of the public, it is not unreasonable to expect that varsity athletics in such schools and colleges will reflect

³ Otto Hughes, and Virgil Schooler, *A Survey of Athletics in the Secondary Schools of the North Central Association*, Bulletin of the Indiana University School of Education, Vol. 32, No. 4 (July, 1956).

⁴ William Hughes and Esther French, *The Administration of Physical Education for Schools and Colleges* (New York, Ronald, 1954), p. 309. Copyright ©, 1954, The Ronald Press Company. Reprinted by permission of the publishers.

the public rather than the educational point of view. Where this is the case, it can scarcely be hoped that athletics will attain perfection in the imperfect society which so profoundly influences their policies. If interscholastic and intercollegiate athletics are ever to reflect the education rather than the public point of view, they must first achieve financial independence.

The Educational Policies Commission strongly recommends that the complete costs of the interscholastic athletic program be paid out of general school funds. In some states this cannot be done until permissive legislation is passed. Such legislation should be initiated in those states where it is needed.

The results of financing interscholastic athletics entirely out of tax funds in one city are reported as follows:⁴

1. The high school program has ceased to be a commercial enterprise, dependent on gate receipts. Outside pressure for postseason, charity, all-star, and curtain raiser games have been eliminated.
2. More adequate health and safety protection is accomplished by having fewer games and contests, avoiding play during inclement weather, providing safe equipment and safe transportation, and valuing the health of the participant above the winning of the game.
3. Most football games are now played on week-end afternoons, with resulting decrease in such problems as vandalism and rowdyism.
4. All schools within a system are assured of equal quality of equipment and supplies. Through central purchasing savings can be had.
5. Some of the hidden costs of public high schools athletic fees, are reduced for the student.

Sources of Athletic Income in High Schools. Brammell made a study of the sources of income for interscholastic athletics. His findings are indicated on page 364.⁵

In a recent study Adams found the five most frequent sources of income were: (1) gate receipts, (2) board of education, (3) student activity fees, (4) season tickets, and (5) athletic association membership fees.⁷ A comparison of Brammell's and Adams' data shows a close agreement regarding sources of income for interscholastic

⁴ Educational Policies Commission, *School Athletics* (Washington, D. C., National Education Association and American Association of School Administrators, 1955), p. 66.

⁵ R. P. Brammell, "Intramural and Interscholastic Athletics," *National Survey of Secondary Schools* (Washington, D. C., U. S. Office of Education, 1932), Bull. 17, p. 82.

⁷ Adams, *op. cit.*, p. 45.

<i>Source of Income</i>	<i>Frequency</i>
Ticket sales	276
Pool of funds from extracurricular activities.....	65
Board of education	32
Plays, entertainments, and special efforts.....	16
Athletic association membership fees.....	14
Student council, student body fees.....	12
Donations.....	5
General organization dues.....	2
Department of physical education.....	1
Assessing home rooms.....	1
Profits from magazine subscriptions.....	1
Candy sales	1

athletics, despite the considerable interval of time between the two studies.

Gate receipts. These two studies reveal the importance of gate receipts as a source of income. Football and basketball are the chief income-producing sports, although even these are not operated at a profit in many small schools. The other interscholastic sports rarely produce a profit.

Gate receipts should come predominantly from the adult public. It is an accepted policy to keep admission prices for students at a minimum. Athletics are organized for the benefit of students, who should not be deprived of the opportunity to attend because of high admission prices. A small number of high schools admit all students free. Students should also be given priority when it is necessary to limit attendance at indoor athletic contests because of inadequate seating accommodations.

The philosophy that the interschool athletic program should be subsidized by the institution does not infer that gate receipts should be abolished. Although this measure has considerable merit it is too revolutionary to be practical at the present time. Gate receipts are not objectionable so long as they are incidental. Sufficient funds should be appropriated to insure the adequate operation of the program. The gate receipts would then revert to the institutional budget.

The income from gate receipts is used to purchase equipment for athletic squads, to pay costs of team trips, medical care, scouting, advertising, towels, laundry, awards, films, officials, and other operational expenses. In many communities deficits will be paid by the school district or from the student body funds. It is exceptional

to require that the deficit be liquidated during the ensuing year. Some schools are fortunate enough to have surpluses at the end of the year. Such surpluses are either carried over to succeeding years, transferred to the student body budget, or turned over to the school district.

Student activity fees. Another important source of income is derived from the student activity fee. A substantial majority of high schools have adopted a student activity plan to provide support for all student activities. Under this plan each student pays a prescribed amount—usually from \$5.00 to \$8.00—which entitles him to admission to all home athletic contests and to all other school functions for which there is a charge, such as school plays, concerts, and operettas. In addition, the cost of the student newspaper and the school annual is defrayed in whole or in part. Most schools also admit students from out-of-town institutions to athletic contests at a reduced rate upon presentation of the student body card. Students who do not belong to the student activity association are usually admitted to home contests at a reduced fee.

The income from student body fees is usually apportioned over the various student activities. The allocation may be made by the student council, a student activity board, or a committee which consists of representatives of the various activities.

Various arrangements are made to collect the student activity fee. In some schools the entire fee is collected in a lump sum early in the fall. In others the fee is paid on the installment basis, such as 15 cents per week for each week of the school year or 25 cents per week until the activity ticket is paid for. Experience has demonstrated that it is better practice to have the activity ticket completely paid for before the basketball schedule is completed. In the majority of schools the student activity plan is not compulsory. This plan, however, interests a larger percentage of students in the various activities than any other.

Student athletic association. In some schools each student is assessed a certain amount which entitles him to membership in the student athletic association. The cost of membership in the athletic association varies from \$2.00 to \$5.00 per year and gives the student the privilege of attending all home games. Membership may be required or optional. This method was quite popular a number of

years ago but has been replaced in many schools by the student activity plan.

Miscellaneous sources. Many high schools find it necessary to resort to additional methods of raising money. In the smaller institutions, the revenue from gate receipts, school board appropriations, and student fees is often insufficient to meet all of the expenditures. In addition to the miscellaneous sources of income cited above by Brammell, funds may be raised by dances, operettas, concerts, carnivals, pageants, minstrel shows, a school circus, class socials, plays, moving pictures, and picnics. These methods of raising money frequently prevent athletic deficits. Some schools find it necessary to use one or more of such methods annually. The chief objection to raising money in this way is that students spend too much time and effort upon the particular activity. At times, also, these activities take an undue amount of the teachers' time. If these money-raising ventures are overdone, the public becomes resentful.

Type of Student Tickets. Regardless of the manner in which students pay for their home athletic events, most schools provide some type of season ticket for them. In some institutions, a ticket is used which is punched in the appropriate space for each contest. Other institutions use a booklet made up of detachable slips which are consecutively numbered. The student's signature is on the cover of the booklet, and a space is provided on each slip for his signature. For each contest, a designated slip is detached from the booklet. For identification purposes, students may be asked to sign the slip, and the signature may be compared with that on the cover. Some schools attach small photographs to the season ticket or booklet to eliminate their use by others than students. Student tickets should not be transferable.

Sources of Athletic Income in Colleges and Universities. In the institutions of higher learning the chief sources of athletic income are gate receipts, student athletic fees, activity tickets, and institutional appropriations. Additional sources of revenue may be contributions, subscriptions, concessions, programs, parking fees, rentals, and radio and television broadcasting fees.

Contrary to the popular impression, intercollegiate athletics in the great majority of institutions are not self-supporting. Were it not for substantial support from institutional budgets, most intercollegiate athletic programs could not continue. The salaries of coaches and

concessions are frequently overlooked or, if they are used, they are inefficiently operated. Professional teams and large university athletic departments have discovered that there is substantial revenue in concessions if they are properly handled.

Concessions may be handled by the school itself or by an outside concessionaire. Within the school it may be operated by the physical education or athletic department, the athletic association, or by some student organization. When concessions are handled outside the school, the concessionaire should be selected after competitive bids have been received. In advertising bids the detailed specifications which will govern the concession should be stated and should become part of the concession contract. The concession specifications should require that the concessionaire sell no commodities and employ no persons of which the school may disapprove. Standards of sanitation and methods of vending should also be explicitly stated.

The contract should provide for payment of a percentage of gross receipts. The flat-sum arrangement may work a hardship on the institution or the concessionaire. Net income should not be used as the basis for determining percentages as there is invariably the question of what costs the concessionaire will include in determining net proceeds.

For interschool athletic events that draw considerable attendance, the management of the concessions becomes a business operation of such size that high schools and colleges have difficulty handling it effectively. In these instances most of the institutions have found it advantageous to have a concessionaire handle them. Experience has shown that more income has been received from a concessionaire than from a school-operated concession.

Increasing Gate Receipts. The best way to increase gate receipts from high school and college athletics is to have winning teams. However, there are other methods of making athletic contests more attractive to the public. A season ticket sold at a reduced rate is one of the most effective methods of increasing gate receipts. Such a plan guarantees a definite income despite poor teams and bad weather. It also provides funds early in the season when they are needed to get under way. Adults are appreciative of the opportunity because it results in a saving to them. The price of a season ticket varies from 50 to 75 per cent of the total cost of tickets to each

home game. If season tickets are made transferable, they will prove more attractive to adults.

In many communities reserved seats will appeal to certain adults. Some individuals are willing to pay more if they are assured of a good seat. There are always individuals who are unable to arrive at the game in time to get a good seat, who would not attend if reserved seats were not available.

Well-coached teams appeal to the public. Public interest cools quickly when the players demonstrate poor fundamentals and appear disorganized. Many individuals will continue to support a team even in defeat if it gives the appearance of being well coached. In this connection, it is important to schedule opponents of approximately the same strength as the home team. Unevenly matched teams are not good attractions. In addition to being well coached, teams will appeal more to spectators if they are smartly attired.

One of the strongest attractions and most colorful features of athletic contests is the music, cheering, and pregame and half-time entertainment. Good officiating adds to everyone's enjoyment of a game. Attractive, accurate programs, a good scoreboard and a loud-speaker system with a capable announcer are all factors which provide satisfaction to the spectators.

Other factors which contribute to the comfort and enjoyment of spectators are good seats, convenient entrances and exits, and a sufficient number of clean readily accessible restrooms. Good parking facilities near the athletic field or gymnasium is an important consideration. Contests should always be started at the time advertised.

There is no question whatsoever that night football produces substantially more revenue than afternoon contests. A large part of the adult public who find it impossible to leave their work or business in the afternoon are able to attend at night. There is, however, considerable opposition to night football from the standpoint of being less desirable for students.

The importance of good publicity in increasing gate receipts is well established. The entire matter of publicity is discussed in Chapter 14.

The Control of Finances. In the early days of interscholastic and intercollegiate athletics, the control of finances resided in the hands of the coach or graduate manager. These individuals were rarely

called upon to account for the funds of the athletic department, and audits to check the athletic accounts were seldom used. Under these conditions, it is not surprising that a great deal of money was misused and misappropriated. Such financial practices naturally served to increase the evils of commercialization and subsidization.

High schools. More financially and educationally sound methods of handling interscholastic athletic funds have evolved in recent years. In general, the trend is for these moneys to be handled in the same manner as other school funds. Adams, in an extensive study of interscholastic athletics, found that the persons responsible for the control of athletic funds in the order of frequency were: (1) the principal, (2) a member of the business department of the faculty, (3) the business manager of the school system, (4) the faculty manager of athletics, and (5) the superintendent.*

The practice of having the treasurer or business manager of the board of education handle all athletic funds has much to recommend it. Such a plan centralizes all financial matters and insures more businesslike procedure. In particular, a more accurate audit is likely to result. However, many boards of education hesitate to assume the responsibility for athletic funds because they are not tax moneys and do not come within the scope of their duties.

Adams data reveals that in the great majority of high schools all funds are handled within the school itself.* The recommended practice is to use a centralized accounting system whereby the responsibility for all financial accounts is centralized in one individual, such as the principal, commercial teacher, or other designated person. A system whereby the various accounts are decentralized and handled separately leads to confusion and inefficiency.

In the centralized accounting system all athletic funds, along with all other activity funds, are deposited with the school treasurer. Records are maintained for all deposits. When purchases are to be made, a purchase order in triplicate must be signed first by the athletic director and then certified by the school treasurer. One copy goes to the vendor, one copy is retained by the school treasurer, and the remaining copy is kept by the athletic director. Bills are not paid by the school treasurer until an invoice has been received from the vendor and checked by the athletic director or his

* *Ibid.*

* *Ibid.*

representative that the materials received correspond with what has been ordered. At periodic intervals, probably once a month, the school treasurer submits a report to the athletic director and principal on the condition of the athletic budget.

The school treasurer should be bonded for the largest amount of money that he will be responsible for during the year. His accounts should be audited annually by a qualified auditor.

Colleges and universities. As the faculty assumed control of athletics, it undertook to remove the control of finances from the hands of those directly in charge of athletics. Although athletic directors still handle the funds in a number of institutions, the common practice today is to place the handling of athletic finances in the office of the general business manager of the college or university. A number of the larger universities have a business manager within the department. The most satisfactory plan, however, is to have the university treasurer or the university business officer in actual charge of the care and distribution of athletic funds. This individual is usually a highly trained business man, well qualified to handle the funds of the athletic department. Under such a plan, the misuse of funds is reduced to a minimum.

Under this plan, the director may make out a requisition for any purchases he desires to make. This requisition is sent to the purchasing department, where two vouchers are made out and sent to the vendor. The vendor sends the equipment to the athletic department and returns the vouchers with the equipment as bills. The athletic department receives and checks the equipment and vouchers. One of the vouchers is kept on file and the other is sent to the business office, which then pays for the purchase. When the director desires cash, he makes out a requisition directly to the business office for the desired amount. Practically all institutions require receipts from the director or coach for his cash expenditures.

The above plan has much to recommend it. The director may make purchases as he sees fit, as long as he remains within his budget. He is not deprived of his authority to make expenditures. An unfortunate situation exists in some institutions where the business manager dominates the purchase of athletic equipment. If the director is unable to purchase wisely for his department, he is poorly qualified for his position. It would appear that his experience in this field and

his knowledge of the specific use for which the purchases are intended should make it desirable that he be at least consulted when purchases are made for his department.

Special Procedures in Large Cities. Interscholastic athletics in larger cities are usually co-ordinated by an individual who functions from a central office, usually the superintendent's office. Methods of operation vary from city to city. A common practice is to pool all gate receipts and to divide the total amount equally among all schools. In one city all athletic funds are turned over to the central office. Ten per cent of each athletic department's gross receipts is placed in a general fund. The remaining 90 per cent of income is available to each school to use as it desires. The money in the general fund is used to assist the poorer schools in financing their athletic programs. In many cities the purchase of all athletic equipment is co-ordinated through the central office. This results in greater economy and, at the same time, insures each school a reasonable amount of equipment, with no school having an advantage over any other. A central organization is particularly desirable in those cities which have central stadiums and armories or coliseums.

Oakland, Calif., provides an interesting example of a centralized administration of interscholastic athletics.¹⁰ In this city the school district assumes the responsibility of providing the coach and his salary, the supervisory staff, and all facilities including their maintenance. The gate receipts for all interscholastic athletic competition are deposited in a central fund. From this fund the director of physical education pays for all transportation costs, officiating, all medical expenses, including physician's fees, and all other expenses of a general nature. Each spring each school receives an identical allotment from the central fund. Schools are not permitted to use student body or other funds to supplement this allotment. Each school is also provided with a petty cash fund of \$25.00 each semester for incidental expenses.

pieces of equipment which can be standardized, such as balls of all types, baseball bats, and shoulder pads, the coaches of the various sports reach an agreement as to what they prefer. The specifications for these items are set up and bids invited. Samples equal or superior to the standard in quality, utility, and construction must be submitted. The coaches meet to make the final selection. All equipment not meeting the specifications is eliminated. The lowest bidder receives the order for equipment meeting the standards. In the matter of athletic clothing for the various sports each school decides upon the quality, pattern, and colors. Specifications are then set up and bids invited. Samples must be made available. Again, the lowest bidder whose samples are satisfactory receives the order.

When purchases are made the successful bidder is sent a purchase order. At the same time the school receives a duplicate purchase order. Upon receipt of the invoice from the seller and the duplicate purchase order from the school, properly signed and certifying that goods have been received in the quantity and quality as ordered, the bill is paid.

Snyder enumerates the values of this equalization plan as follows:¹¹

expenditures for a fiscal period. This process is essentially what is known as budget making. A budget is merely the complete financial plan, which is based upon the estimated expenditures to be made and the expected income. Budget making naturally originated in connection with business and governmental enterprises. The practice was found desirable and has since extended to most business enterprises and public service organizations, including the schools.

The safest way to avoid deficits in physical education is to adopt budgets which limit the appropriations to the income and then confine the expenditures to the appropriations. The budget results in planned spending. It is the best insurance of an equitable distribution of available funds to all the activities of the physical education department. Examples of the spending of too much money on one sport resulting in the curtailment or elimination of other sports are not hard to find. The antagonisms and embarrassment which may develop when this occurs could be eliminated if a budget were set up and followed. By means of the budget, the director can show where the money was spent and thus prevent any suspicion of misuse of funds. The need for increased appropriations can be shown and justified more easily and effectively with a budget than without one. Extravagant and foolish buying will be checked, and comparisons with previous years and with other institutions can be made. The budget permits an analysis of the cost of the various sports and reveals where revision can be made, if necessary, with the least loss in the effectiveness of the department.

Procedure in Making a Budget. There are far more poorly constructed budgets than well-constructed ones, since few physical education departments construct them in accordance with the accepted principles of budgetary procedure. Every school presents an individual problem, but there are some fundamental principles which should be observed by any director who is constructing a budget. There is nothing mysterious about making one; nor is it necessary to be a business expert to do it. Any administrator can construct a satisfactory budget by following carefully a few fundamental principles.

Physical education and athletic budgets are ordinarily prepared in March or April. They are made out annually. The director of physical education has the responsibility for formulating the physical education budget. In colleges and universities the athletic director

develops the athletic budget. This same situation prevails in the majority of high schools. However, the principal has this responsibility in many schools. The superintendent, particularly in smaller schools, frequently carries this assignment. Other groups or individuals with this responsibility are the athletic council and the faculty manager of athletics.

The steps in constructing a budget are:

1. Collecting the necessary information.
2. Classifying the information.
3. Presenting and adopting the budget.

Collecting the necessary information. The information the budget maker collects is concerned with the expected income and necessary expenditures. In estimating the income for the coming fiscal period, the director must consider carefully all the sources from which he may expect revenue. He will know what guarantees will be received for all contests away from home unless the guarantee is dependent upon gate receipts. In the light of past years, how much can be expected at the gate for each home contest throughout the year? Are there any factors during the coming year which will influence the gate receipts one way or another? Will the teams be particularly good or bad? Are colorful teams to be played? Are unusual attractions which will add to gate receipts to be provided? Are strong counterattractions occurring on the days of games? These are only a few of the questions which the director must consider as he estimates the anticipated revenue from gate receipts. He should be conservative in his estimates rather than optimistic. Weather conditions cannot be forecast for the coming year. Basketball is easier to estimate than football because weather conditions do not figure so heavily. In regard to student fees, the director will need to consider any factors which may affect enrollment and the students' desire and ability to purchase season tickets. The appropriation from the board of education or the board of trustees can be estimated from previous appropriations. The director is usually familiar with the board's policies and will probably know whether any changes in the appropriation are likely. If revenue is anticipated from any additional sources, the amount may be calculated on the basis of previous income from these sources.

The estimate of expenditures proceeds along similar lines. The guarantees to be paid opponents are already known unless the gate receipts are to be divided. The cost of transportation and other expenses of trips can be estimated quite accurately on the basis of previous trips. Approximately what will be the expense of each home game? Officials, student help, faculty help, policemen, publicity, tickets, and rent are some of the expense items to be considered in figuring the cost of home games. What purchases will have to be made? This is a difficult item to estimate. An inventory of the equipment on hand is necessary before any accurate estimate of future needs can be made. The cost of purchases may be secured fairly accurately by consulting the cost of the same items in the past. Investigation of the prices other schools are paying is also of assistance. Price trends and the probable future prices must be considered. An average of the past five years may be used to estimate the cost of other items, such as laundry, medical attention and supplies, scouting, awards, intramural activities, and equipment repairs. Office supplies, insurance, telephone, and telegraph expense can be estimated on the basis of previous years' expenditures. The director should never forget that the budget is no better than the time spent estimating it.

Information about these various items should be gathered and compiled continuously. All the needs observed should be noted throughout the year. The entire department should be encouraged to inform the director of present and future needs in order that he may know where new expenditures are needed most. The director should not fail to consult the various staff members who are in a position to assist in supplying needed information. He should keep in constant touch with the supply houses and read current catalogues on the cost of physical education and athletic equipment.

Administrators should present honest budgets and be prepared to justify them.

Classifying the information. After the information has been gathered it should be classified. This insures uniformity of presentation and makes for accuracy in planning. It facilitates the gathering and compiling of the data, and it makes easier the reviewing and revising of the estimates. The form the classification takes should resemble the form of the final budget. The information relating to capital outlays and maintenance and operation of the plant is not included in the physical education budget. In high school and most college budgets salaries are not included. All the information is classified under two general heads: one dealing with the information concerning revenue and the other bearing on expenditures. Every item for which an expenditure is contemplated, even though it may amount to only a few dollars, should be reflected in the budget. These smaller items can be segregated under larger headings, but the detailed information should be available if requested. Sample classifications for physical education and athletic budgets are illustrated on pp. 379-385.

Presenting and adopting the budget. In colleges the physical education budget is first approved by the athletic committee or board, which usually administers the policies of the department. If no such group exists, the president probably approves it. Final approval of the budget is usually made by the board of trustees or board of regents. High school budgets are first approved by the principal, then by the superintendent, and, finally, by the board of education. At times, the business manager of the college or high school approves the budget before it goes to the board of education or board of trustees. The budget should be adopted before any purchases are made or expenditures entered into for the next year. The fiscal period in use is frequently a factor in the success or shortcomings of the budget, and for this reason, it seems advisable to suggest July 1st as the first day of the fiscal year, because the latter will then approximately coincide with the school year.

be made as directed. Others hold to the view that the budget should be reviewed again when the expenditures are actually to be made. The general practice, however, is to follow the budget figures fairly closely. The variation is usually from 3 to 5 per cent in which the expenditures exceed or fail to match the appropriations.

Practically all budgets make provisions for readjustments. Emergencies are certain to occur, and the budget should be elastic enough to provide for them. There are several different plans which may be followed. An emergency or contingency fund may be set aside in the original budget. But if this fund is too small, the administrator may feel cramped in his efforts to adjust appropriations to unforeseen circumstances. If on the other hand, the fund is too large, it may encourage waste and carelessness and thus defeat one of the main purposes of budget making. The most common plan is to transfer funds from one budgetary item which appears likely not to need all the available money to the item on which the demand has unexpectedly increased. Such transfers, if appreciable, however, must have the approval of the athletic board, the business manager, or perhaps, in a college, the president.

Proper records should be kept in order that the actual revenue and expenditures may be compared with the budget estimates. These records are invaluable to the administrator as he prepares his new budget. In addition, they are of value in making necessary adjustments where indicated in the current budget. The administrator should receive monthly reports so that he may know the relationship of income and expenses with the budget estimates. He needs to know whether actual income is in line with his estimates. Insofar as expenditures are concerned he must always know the amount appropriated, the amount expended, commitments which must be paid but have not yet been received, and the unallocated balance. If income is much lower than anticipated during the first half of the fiscal period, it might be indicated that expenditures should be reduced in the second half of the period to prevent a serious deficit.

A Practical Budget. The physical education department may have one or two budgets, depending upon whether or not the athletic budget is separate. Below is a budget which may be used by a large university or modified to meet the needs of a small high school:

PHYSICAL EDUCATION BUDGET I

RECEIPTS		
Football	(See Schedule I)	xxx.xx
	Sample Schedule	
Basketball	(Schedule II)	xxx.xx
Baseball	(Schedule III)	xxx.xx
Track and cross-country	(Schedule IV)	xxx.xx
Swimming	(Schedule V)	xxx.xx
Golf	(Schedule VI)	xxx.xx
Tennis	(Schedule VII)	xxx.xx
Wrestling	(Schedule VIII)	xxx.xx
Gymnastics	(Schedule IX)	xxx.xx
Appropriations	(Schedule X)	xxx.xx
Donations and sub- scriptions	(Schedule XI)	xxx.xx
Other income	(Schedule XII)	xxx.xx
<i>Total estimated receipts</i>		<u>xxxx.xx</u>

EXPENDITURES		
Football	(Schedule XIII)	xxx.xx
Basketball	(See Schedule XIV)	xxx.xx
Baseball	(Schedule XV)	xxx.xx
Track and cross-country	(Schedule XVI)	xxx.xx
Swimming	(Schedule XVII)	xxx.xx
Wrestling	(Schedule XVIII)	xxx.xx
Golf	(Schedule XIX)	xxx.xx
Tennis	(Schedule XX)	xxx.xx
Gymnastics	(Schedule XXI)	xxx.xx
Required physical education	(Schedule XXII)	xxx.xx
Intramural athletics	(Schedule XXIII)	xxx.xx
Teacher training	(Schedule XXIV)	xxx.xx
General	(Schedule XXV)	xxx.xx
<i>Total estimated expenditures</i>		<u>xxxx.xx</u>

Each source of income is explained in greater detail in the actual schedule for that source. Expenditures are also itemized in greater detail in the schedules. The following schedules are illustrative:

PHYSICAL EDUCATION

SCHEDULE I
Football Receipts

1. Game at	xxx.xx
2. Game at	xxx.xx
3. Game at	xxx.xx
4. Game at	xxx.xx
5. Game at	xxx.xx
7. Game at	xxx.xx
8. Game at	xxx.xx
Radio broadcast receipts	xxx.xx
Program receipts	xxx.xx
Concession receipts	xxx.xx
<i>Total estimated football receipts</i>	<u>xxxx.xx</u>

SCHEDULE XIV
Basketball Expenditures

Office expense	xxx.xx
Printing and advertising	xxx.xx
Travel	xxx.xx
Wages	xxx.xx
Salaries	xxx.xx
Equipment and supplies	xxx.xx
Clearing and expenditures	xxx.xx
Awards	xxx.xx
Medical attention and supplies	xxx.xx
Officials	xxx.xx
Guarantees	xxx.xx
General	xxx.xx
<i>Total estimated basketball expenditures</i>	<u>xxxx.xx</u>

The various expenditure schedules may be itemized in greater detail. The following classification and codification are suggested as an aid in keeping a detailed, reliable record of expenditures in the physical education department:

CLASSIFICATION OF ACTIVITIES

A. Football	H. Tennis
B. Baseball	I. Gymnastics
C. Basketball	J. Required physical education
D. Track and cross-country	K. Intramural athletics
E. Wrestling	L. Teacher training
F. Swimming	M. General
G. Golf	

CLASSIFICATION OF ACCOUNTS

Office Expense

- 011 Dues and subscriptions
- 012 Stamps and postage
- 013 Telephone and telegraph
- 014 Freight, express, and cartage
- 015 General

Printing

- 021 Tickets, yearbooks
- 022 Advertising—newspapers and magazines
- 023 Advertising—posters, schedules, etc.
- 024 Advertising—photographs and engraving
- 025 General printing

Travel

- 031 Team transportation
- 032 Scouting
- 033 Local transportation
- 034 Hotel and lodging
- 035 Meals
- 036 General travel

Supplies

- 041 Athletic supplies (not equipment)
- 042 Medical supplies
- 043 Grounds and pool supplies
- 044 General

Repairs

- 051 Equipment repairs
- 052 General repairs

Wages

- 061 Handling bleachers
- 062 Ticket takers and ticket sellers
- 063 Police
- 064 Assistants to medical supervisor
- 065 Auditing
- 066 Student help in equipment room, towel box
- 067 General

Equipment

- 071 Equipment
- 072 General

Laundry and Cleaning

- 081 Towels
- 082 Dry cleaning
- 083 Laundry

Insurance

- 091 Travel
- 092 Earnings
- 093 Public liability

Other Expenditures

- 101 Hospital and dental service
- 102 Medical attention
- 103 Awards
- 104 Guarantees
- 105 Officials—fees and expenses

In those institutions where salaries are paid from athletic revenue, a salaries account should be carried. This would include all salaries which are not paid directly by the institution. The preceding classification is used as follows: every expenditure made is allocated to some activity. Thus, if a telephone bill for football is paid, football is charged with the amount of the bill. Therefore, the item will be recorded as 013A. The 013 refers to telephone and telegraph expense and the A to football. Intramural awards would be recorded as 103K. A trip by the tennis squad would be recorded as 031H for the transportation expense, 034H for the hotel expense, and 035H for the meal expense. When all expenditures are classified in this manner as they occur, it is a simple matter to find out what the total expenditures for each activity have been. The coach himself may employ the above system of recording expenditures in order to know the cost of the various items and activities without having recourse to the business office or the school treasurer.

If a simpler, less detailed budget is desired, the example listed below may be followed. This budget, which was used in a small college, can readily be adapted to a high school.

PHYSICAL EDUCATION BUDGET II

INCOME

Student activity tickets.....	xxx.xx
Gate receipts, guaranties—football.....	xxx.xx
Gate receipts, guaranties—basketball	xxx.xx
Gate receipts, guaranties—baseball	xxx.xx
Gate receipts, guaranties—track.....	xxx.xx
Other income	xxx.xx
<i>Total income</i>	<i>xxxx.xx</i>

EXPENDITURES

General Items, Office

Calls and telegrams	xxx.xx
Stamps, stationery, and office supplies.....	xxx.xx
Student help (stenographer and secretary)	xxx.xx
<i>Total</i>	xxx.xx

General Items for All Activities

Organization—dues and assessments	xxx.xx
Expense for attending conference meetings.....	xxx.xx
Medical examination for varsity and freshman squad.....	xxx.xx
Medical and training supplies	xxx.xx
New towels	xxx.xx
Laundry of towels	xxx.xx
Laundry and repairs (general items).....	xxx.xx
Lining materials for fields	xxx.xx
<i>Total</i>	xxx.xx

Intramurals

New equipment	xxx.xx
Trophies and medals	xxx.xx
<i>Total</i>	xxx.xx

Tennis

Equipment	xxx.xx
Traveling expense	xxx.xx
Medical attention	xx.xx
Awards	xx.xx
<i>Total</i>	xxx.xx

Swimming

Equipment	xxx.xx
Traveling expense	xxx.xx
Medical attention	xxx.xx
Officials	xxx.xx
Awards	xxx.xx
<i>Total</i>	xxx.xx

Cross-country

Equipment	xxx.xx
Traveling expense	xxx.xx
Medical attention	xxx.xx
Awards	xxx.xx
<i>Total</i>	xxx.xx

Golf

Traveling expense	xxx.xx
Awards	xxx.xx
<i>Total</i>	xxxx.xx

Wrestling

Equipment	xxx.xx
Traveling expense	xxx.xx
Medical attention	xxx.xx
Officials	xxx.xx
Awards	xxx.xx
<i>Total</i>	xxxx.xx

Baseball

Equipment	xxx.xx
Traveling expense	xxx.xx
Medical attention	xxx.xx
Officials	xxx.xx
Awards—varsity	xxx.xx
Awards—freshmen	xxx.xx
Miscellaneous (games)	xxx.xx
<i>Total</i>	xxxx.xx

Track

Equipment	xxx.xx
Traveling expense	xxx.xx
Medical attention	xxx.xx
Officials	xxx.xx
Awards—varsity	xxx.xx
Awards—freshmen	xxx.xx
Miscellaneous (meets)	xxx.xx
<i>Total</i>	xxxx.xx

Basketball

Equipment	xxx.xx
Traveling expense	xxx.xx
Medical attention	xxx.xx
Officials	xxx.xx
Publicity and advertising	xxx.xx
Rent of floor	xxx.xx
Cleaning and repairing equipment	xxx.xx
Awards—varsity	xxx.xx
Awards—freshmen	xxx.xx
Miscellaneous (games)	xxx.xx
<i>Total</i>	xxxx.xx

Football

Equipment	XXX.XX
Traveling expense	XXX.XX
Medical attention	XXX.XX
Officials	XXX.XX
Publicity and advertising	XXX.XX
Cleaning and repairing equipment	XXX.XX
Awards—varsity	XXX.XX
Awards—freshmen	XXX.XX
Miscellaneous (games)	
<i>Total</i>	XXXX.XX
<i>Total expenditures</i>	XXXXX.XX

The Accounting Procedure. The proper functioning of the budget and the success of budgetary procedures depend largely upon an adequate accounting system. Although the director is rarely in charge of the accounting procedure, he should have some conception of it. It would be impossible for the director to conduct his department on a businesslike basis without the help of the accounting system. It serves to restrict the expenditures to income. Unanticipated tendencies in cost and income will be revealed in time to revise the budget. The director secures much of the information for drafting the budget from the accounting records. The accounting method protects the director or the coach from charges of carelessness and misuse of funds. Upon the information supplied by the accounting records, the director can base his request for further financial assistance from the board.

The individual in charge of the physical education finances is interested in current income and expenses. The accounting method classifies revenue on the receipts side of the budget. However, the recording of current expenditures is more complex. Pittenger states that there are four essential parts in recording expenditures:¹³

1. Original records of every transaction involving expenditure of funds are preserved. These records are almost indispensable when the time comes to audit the physical education accounts.

2. Some form of day book or journal record of expenditures is often useful to serve, on the one hand, as a guide to the original record files, and on the other, as the basis from which to post the regular ledger accounts.

¹³ B. J. Pittenger, *An Introduction to School Finance* (Boston, Houghton Mifflin, 1935), p. 113.

This feature is omitted, however, in the smaller high schools, where the ledger pages are posted directly from the original records of financial transactions.

3. The heart of the system is the classified ledger record in which the completed expenditures are regularly posted against the budgetary appropriations in order to reveal the amount expended and the amount remaining for each and every budgetary item at any time.

4. The final state of the accounting procedure is reached in the periodical reports, balance sheet, and revenue statement from the accounting officer to the director of physical education setting forth the current financial situation.

The annual audit. Provisions for frequent, regular audits must be made if the budget is to function properly as an instrument of fiscal control. An audit serves as a check on the manner in which the director administers the budget and gives assurance that the budgetary provisions are being carried out. The audit should be made by competent auditors who are not directly connected with the administration of the school funds. The great majority of schools follow this practice. The head of the commercial department often makes the audit. The audit should be made annually, because the work involved is less confusing and a closer check can be made than when it is delayed. Good budgetary procedure requires an external, independent, annual audit.

Expense Reports. Following a trip by a school athletic team a report should be made of the expenses which were incurred. Receipts should be obtained for all expenditures for which cash is paid. Most of the larger institutions employ a form similar to the one used by the University of Pennsylvania (see opposite page). The use of such a form facilitates the accounting of the expenses and is a more businesslike procedure than that followed in schools which do not use any forms.

Interschool Financial Agreement. Practically all colleges and large high schools sign contracts with each other for all interschool contests. The practice of making verbal financial agreements still persists in some of the smaller high schools. Such a procedure is hardly businesslike, and it naturally lends itself to misunderstanding and mistakes. In order to make financial agreements between schools more understandable, more explicit, and more binding, regular contracts should be signed by both schools for all contests.

These contract forms are supplied by the state associations or conferences.

Handling School Funds. Schools are frequently careless in their management of gate receipts. The large sums of money which often are involved should call forth all precautions to insure against loss. Another argument for the sale of tickets in advance of the game is that it prevents the accumulation of large sums of money. Theft insurance is carried by all large schools, and the game manager is usually bonded. Plenty of police protection should be provided, particularly when the funds are collected and taken from the ticket offices. Unless the amount is very small, arrangements should be made to deposit the gate receipts in a bank or police station after the game.

It is a cardinal principle in schools as well as in business organizations that all financial transactions should be recorded in some tangible way. It is for this reason that receipts for all purchases are necessary. By the same token, when money is received receipts should be given and carbons retained. Such receipts are essential when the accounts are audited. An accurate record must also be available of ticket sales at athletic contests. Ordinarily this is done by recording the number on the roll prior to and following the game. These data are also necessary for the auditors.

Game Reports. In many schools the athletic director is expected to provide game reports after each contest. This report includes such items as attendance (according to such categories as children, students, general admissions, and so forth), gate receipts, complimentary tickets, expenses, other income, weather conditions, and the score. These reports serve as a valuable record for future use, especially in the preparation of future budgets.

Petty Cash Fund. It is an established business procedure for the administrator to have a small petty cash fund of approximately \$25.00 from which he can make small purchases. It is much simpler to make purchases of less than two dollars directly rather than to make out a purchase requisition. Receipts for all purchases should be obtained. When the petty cash fund is exhausted, the receipts should be submitted along with the request for an additional appropriation.

SELECTED REFERENCES

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- HUGHES, W. L., and FRENCH, Esther, *The Administration of Physical Education* (New York, Barnes, 1954), ch. 16.
- SCOTT, Harry Alexander, *Competitive Sports in Schools and Colleges* (New York, Harper, 1951), ch. 8.
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The Purchase and Care of Equipment

Importance. The purchase and care of equipment was not an important responsibility of those in charge of the first interschool teams, for the players furnished their own equipment. As interscholastic and intercollegiate athletics grew, schools undertook to equip the players. For a number of years the equipment item did not assume large proportions because little equipment was needed. The athletic program was limited to a few sports, the squads were small, and the players were not equipped so elaborately and completely as they are today. Furthermore, the cost of athletic equipment was considerably less than it is at present.

Today, the purchase and care of equipment constitutes one of the director's most important responsibilities. Most athletic departments feel obligated to protect the members of the teams to a reasonable extent with adequate equipment. Not only are the injuries reduced but well-equipped, well-dressed teams appeal more to the public than unattractive teams. Equipment expense has become one of the largest items in the athletic budget and a great deal of money may be wasted unless equipment is purchased carefully and cared for properly. A great deal has been learned about buying and caring for equipment in recent years. Directors have purchased equipment more wisely and have cared for it more carefully since the beginning of World War II. Many of the expense items in the budget do not lend themselves readily to reductions, but directors have found numerous ways by which they can reduce the expense of equipment without appreciably impairing its effectiveness and appearance. It is essential that every director know

equipment thoroughly and be acquainted with the policies, methods, and techniques by which equipment might be bought and cared for most economically.

Provision of Equipment by School. Practically all schools provide the playing equipment for the service and intramural programs. The student is expected to furnish his own uniform. Many schools provide towels and towel service at no cost to students, but many make a charge for this service. In still other schools the provision of clean towels is the responsibility of the student. This means that he must bring his own towel and take it home for laundering. This practice is not recommended because of the problems involved in administering it.

For interschool athletics it is highly desirable to have the school to furnish most items of equipment, including uniforms. Adams study revealed that in 60 per cent of large high schools, 48 per cent of medium-sized high schools, and 34 per cent of small high schools, all personal equipment was furnished to squad members.¹ In approximately 62 per cent of the small high schools and 45 per cent of the medium-sized high schools, shoes were not furnished by the school. Many high schools rent shoes—particularly football shoes—to the players. An appreciable percentage of small and medium-sized high schools do not furnish socks or gloves. Virtually all schools provide playing uniforms, but it is exceptional for a school to furnish such specialized and personal equipment as golf clubs and tennis rackets.

Students should not be required to provide all or part of their uniform, because, inevitably, some will be unable to afford to become candidates for teams. Equally undesirable is the practice of using cheap, ill-fitting equipment which has been borrowed or handed down year after year. Some parents will purchase football shoes which are too large with the hope that they will last the student three years. The provision of most items of athletic equipment by the school is a standard toward which all physical education departments should work.

Purchasing Equipment. The coach should always be consulted in the purchasing of athletic equipment for his squad. He knows the specifications, he understands what materials are needed and how they are to be used, and he sees them tried and tested. He comes

¹ Adams, *op. cit.*, p. 15.

into contact with the problems which are presented by the equipment. This practical experience with athletic goods enable the coach to make valuable suggestions and recommendations.

The athletic director also plays an important role in the purchase of equipment. He may have far more experience with equipment than the coach, and if this is the situation, he should tactfully guide the coach in his recommendations. He must also determine that the equipment request is in line with the budget and that the amount and type of equipment ordered can be justified.

In high schools the principal usually has the responsibility of approving purchases of athletic equipment. The superintendent also does this frequently, particularly in the smaller schools. The athletic council, board of education, and business manager of the school may also have this responsibility. In colleges and universities the approval of the athletic director is usually all that is necessary. However, the athletic council or the business manager may also give approval.

The inventory. Before athletic equipment is purchased the need for it should be carefully considered. This will necessitate an itemized inventory of the equipment room covering both the amount and the condition of the materials on hand. Some directors can be rightly criticized for being unable to justify amounts of equipment purchased. The inventory is the best insurance against overbuying on some items and underbuying on others. The director and coach should always have firsthand information concerning the amount and condition of the stock on hand, and an accurate idea of team personnel and requirements for the coming season.

Purchasing Policies. After the needs have been determined the director is prepared to buy. But the purchase of athletic equipment involves much more than merely buying goods to the limit of the budget. Every director is anxious to obtain the best service and the longest life in equipment per dollar spent. In order to attain this objective there are some recognized policies of buying which might be followed. Purchasing athletic equipment is a business proposition, and it should be conducted on a businesslike basis. There are certain procedures which are recognized as sound in any business. Although each school presents separate problems, there are certain fundamental principles of buying which will operate successfully in most situations.

Standardization of equipment. "Standardization of equipment" is a common expression among directors. By this term is meant the adoption, by a school, of a certain color, type, and style of equipment, which is maintained over a period of years. There are advantages in buying certain consistent types of equipment, usually from the same firm. It allows for replacement of the equipment in whole or in part. It maintains quality of material and color. The end result is uniformity over a period of years. Economy is practiced in that items can be matched in varied quantities without having to purchase a complete new outfit each season. Parts and replacements are easily obtained and repairs can be made more successfully. The uniformity of equipment for team members adds color to the organization and strengthens the team morale. There is no question that lack of uniformity may be interpreted as bad buying. The director must be alert to the rapid changes in equipment, however, in order that he will not be found with a large store of obsolete or extinct types on hand.

Quality merchandise. It is the consensus of informed opinion that, as a policy, the purchasing of the better grades of equipment is best. The most expensive equipment is not always the best, but it must be recognized that good material will be more expensive than cheap material. It has been proved on numerous occasions that quality merchandise fits better, looks better, wears longer, and can be repaired more advantageously than cheap items. The director must not go to the extreme in paying prices to the point that teams go unequipped on a limited budget, but experience has shown that in the majority of cases, low-cost materials are low-grade materials. The practice of purchasing cheap merchandise for reserve and freshmen teams has not proved to be economical. It is far better to pass down from the varsity squad quality material in good repair than to provide a cheap grade of equipment that may last for the season but gives little promise of being suitable for reconditioning.

Early buying. The director should not overlook the advantages of early buying. Fall equipment should be ordered in the spring and spring equipment in the fall. Many colleges and high schools have their own peculiar designs in different articles of equipment and the manufacturer needs time to make these up. When ordered early, good workmanship is assured, but if the order gets in late, mistakes are more likely to occur. Another advantage of early buying

is that the buyer has the opportunity to return goods that do not meet specifications. Materials that are not up to standard can be returned more conveniently when they have been delivered early.

Early buying also aids the manufacturer. He is better able to estimate the expected volume of business and prepare for it. He can produce better materials at a better price if the labor is spread out over the entire year instead of being accumulated during certain intervals. In addition, the reputable manufacturer has the opportunity to replace materials that are defective or not up to standard.

Buy within range of ability to pay. This is a sound policy in any business. Credit is easily obtained, and many directors have gone heavily into debt as a result of unrestrained purchasing. Even though many schools operate on a budget, it is possible to spend more for equipment than can be afforded. Buying too much and too expensive equipment has plunged many athletic departments into debt. Buying too much equipment is not so serious a mistake as buying too expensive equipment, because the surplus can be used later. Many coaches and directors have been overanxious to equip their teams with the best and have gone to the extreme in their buying. Although quality merchandise is advocated, small high schools cannot afford to buy the same grade of equipment that large universities use. When a director overpurchases equipment, the operations of the entire department may be curtailed, and his ability as an administrator is questioned. Frequently, schools buy recklessly after financially successful years. As a long-term policy, consistent, regular buying is to be preferred.

Purchase from reputable concerns. There are bargains in athletic equipment as well as in other lines of merchandise. The director who knows athletic materials can recognize and take advantage of bargains when he encounters them. However, to be constantly hunting for bargains is a poor policy. Much time and effort will be wasted, and the bargains will frequently prove to be disappointments. Cut prices should be viewed suspiciously. High-grade merchandise cannot be sold consistently at a cut rate. Reputable equipment concerns sell to schools and colleges at reasonable rates and they cannot afford to make a practice of cutting prices. Reliable companies guarantee the excellence of their products and this guarantee is worth paying for. Few directors are accurate judges of textiles, leathers, and other materials used in the manu-

facture of athletic equipment. Cheaper grades of cloth, fiber, padding and leather can be made to look like better grade materials. Unless the director knows equipment thoroughly, he must rely upon the integrity of the companies with which he deals. Every director will discover that buying from reputable firms will prove more satisfactory and more economical as a long-term policy.

This does not mean that all goods should be bought from the same firm year after year. There are tendencies to form too strong an attachment for a particular manufacturer against which one must be alert. The quality and price of his goods may change to advantage or disadvantage. New materials and new processes may enable one firm to excel temporarily in certain items. It is better to keep an open mind regarding the products of different manufacturers.

Take advantage of legitimate discounts. Many discounts which are offered to prospective buyers are, in reality, no discount at all. The amount of the discount is added to the original selling price in order that it might be taken off to attract purchasers. "Two per cent within ten days" is, however, a legitimate discount. The seller can afford to offer this discount for the advantage of being paid within ten days after the goods are billed. Practically all firms offer this discount and the director can save his department considerable money by taking advantage of it. Many of the larger institutions buy in the spring, but on a September 30th dating. The discount period carries up until October 10th, by which time football gate receipts are available to pay the bill and still take advantage of the discount.

Legitimate discounts may be secured if large quantities of athletic equipment are purchased at one time. The director should take advantage of this discount if his purchases are large enough to obtain it. Frequently, the larger universities ask various reliable companies to submit bids for supplying the athletic equipment. Considerable savings may result by this method of buying, as manufacturers are willing to reduce their selling prices for a larger volume of business.

Official Equipment. Practically all games or sports have certain items of equipment that must be manufactured to specifications and are commonly marked "official." The specifications may call for a definite weight, length, relative dimensions, certain types of material, or the exclusion of certain materials. The purchaser should be acquainted with such specifications or any changes that may occur

from year to year or season to season. Cases have occurred where competitors have been ruled out of an athletic event or records have been refused on the grounds that the implements used were not "official." This may have come about through the ignorance of the purchaser or the misrepresentation of a salesman.

How to Buy. The best buyers study market conditions for proper values. Equipment prices fluctuate and the director who knows when to buy and when to refrain from buying can save his department money. Although prices are fairly uniform among sporting goods houses, excellent values are frequently offered on certain items by the various companies. If the director records and files the prices of equipment of the different firms, he can compare them when he is ready to buy.

It is a fact that the most expensive materials are not always the best. The most effective way to discover how equipment stands up is to use it and check the results. Some universities use spring football and freshmen teams as proving grounds for football equipment. If equipment rooms are properly managed, they should serve as laboratories to check the results of purchasing decisions. It is a simple matter to tag equipment and check it from time to time to see how it wears. The form on the following page is used at the University of Iowa for this purpose. Not only does such a check on the equipment show how it wears but it also indicates the amount of shrinkage of the items tested.

occurs in the institutions which can least afford it. Service is the major factor to be considered in the small schools because the equipment must be used year after year. Very seldom are complete outfits bought for an entire first team or squad; instead, a few uniforms or parts of uniforms are bought. The best solution to the problem is to standardize the equipment and then purchase an excellent grade of material. Fancy, high-priced merchandise is impracticable for the small institutions. The small high schools cannot expect to equip their teams with the same grades of materials that the universities use, but the manufacturers have supplied strong, serviceable equipment which is well suited to their needs.

Approval of Equipment by the National Federation. The National Federation of State High School Athletic Associations has taken a step to make more difficult the sale of unreliable equipment by dishonest companies. A joint committee of the National Federation and a number of leading sporting goods concerns have worked out a plan to establish certain standards of safety and to label approved equipment. Each of the firms agreed to make up a line of merchandise which meets the standards set up by the joint committee. Under the supervision of the committee the materials and types of construction are tested in a United States government testing laboratory, and only those articles which satisfy rigid tests are approved. The approval is indicated by a federation tag and label, which are a guarantee that the materials are exactly as they are represented. The National Federation approval is withdrawn from any article which is found to be inferior. In case dishonesty on the part of the manufacturer is indicated, approval will be withdrawn from all products of that manufacturer.

Ordering Equipment. In any type of school, large or small, order blanks should be used in purchasing equipment. To order verbally is a poor policy. If the director or purchasing agent orders goods verbally he will probably fail to make a record of the transaction. When the merchandise arrives it cannot be checked accurately, and in case of a dispute the buyer will not be able to show just what goods were ordered.

If the director makes a practice of ordering goods by letter he should keep a carbon copy of his letter. Order blanks are preferable, however. They are uniform in size and can be filed systematically. Furthermore, it is desirable to use an order number which will check

with the invoice number. The director who uses order blanks and keeps them filled will have a complete record of his purchases from which he can easily make reports for the season or year.

The samples on the following pages are suggested as guides in printing order blanks and vouchers. The usual letter size, $8\frac{1}{2}$ by 11 inches, is commonly used.

The original copy of the purchase order is sent to the firm with two voucher forms, and the duplicate purchase order, which should be printed on colored stock, is filed until the goods are received. With the duplicate blanks on file, the purchasing agent or director may readily check up at any time to ascertain when the goods were ordered. When the bill is paid the duplicate purchase order may be filed with the receipted voucher. When possible, goods should be ordered by catalogue numbers.

Most schools use voucher forms which have proved satisfactory. The original or white form is filed with the copy of the purchasing order to show payment, and the duplicate is returned to the shipper with the check to show that the bill has been paid. Some firms will return their own voucher forms along with the voucher which was attached to the purchasing order. The vouchers provide for a statement of terms. When orders are placed a number of months or weeks in advance, it is well to state that goods are to be billed at a certain date.

At the lower left-hand corner of the sample voucher the word "Appropriation" is marked. This space should be used for indicating the sport or department to which the goods should be charged. The line marked "Rec'd O.K." is to be used when the goods are received by one person and the voucher is approved by another. At times, there will be mistakes in shipping, and when this is the case the fact will be noted in this space after the goods are unpacked.

There is a difference of opinion regarding the value of purchase order blanks and voucher forms in the smaller institutions. The volume of business in the larger schools necessitates purchase order blanks and vouchers, but there is a need for system and businesslike procedure even when purchasing on a small scale. The cost of printing the forms is really insignificant when distributed over a period of years.

Purchasing Specific Items of Equipment. In this section we shall discuss some specific items of equipment and those features of each

CHART 24

Equipment Voucher

ATHLETIC DEPARTMENT

Name of School

City _____ State

VOUCHER

To be returned to the Purchasing Agent

ALL BILLS MUST BE RENDERED IN DUPLICATE ON THIS FORM

Our order No. _____ Date _____
Must be shown on all voucher forms.

Dr. To. _____ Name of Firm _____
_____ Address of Firm _____
_____ street _____ City _____ State _____

Terms _____ Your Order No. _____ Your Invoice No. _____

Quantity	Material	Unit Price	Total Price	Trade Disc.	Net Amount

Appropriation _____ Approved _____

Rec'd O.K. _____ Date _____

CHART 25

Equipment Order Blank

ATHLETIC DEPARTMENT

Name of School _____

City _____ State _____

PURCHASING ORDER

Date _____

To. _____

Please deliver the following articles to the athletic department:

Quality	Article

Please follow directions exactly

I.
Address every package of goods to

Director _____

Athletic Department _____

School _____

City _____ State _____

Order No. _____

Ship Via. _____

II.

Please bill us goods on the attached voucher forms, returning both the white copy and the duplicate pink copy. Be sure to indicate our purchase order number on all voucher forms.

Purchasing Agent. _____

Approved by. _____

which the purchasing agent should bear in mind when making his selection.

Football shoes. The shoes are very important items of equipment. It is a sound principle to purchase the best shoes that the budget will permit, because, in the long run, it will prove economical. Inasmuch as there are so many different types of leather, tannages, and construction features involved in the manufacture of shoes, it is particularly important to rely upon shoes from reputable manufacturers.

The Goodyear welt construction has been proven by long experience to be excellent for all-around serviceability. Because it is built around a leather insole this type of construction assures a good foundation for the shoe. This will enable it to take the wear and tear, mud, water, and perspiration without losing its shape. Moreover, it is always repairable.

Kangaroo leather—either yellow or blue-black—is the preferred material for shoe uppers because of its light weight, great strength, moisture resistance, pliability, and durability. However, this is the most expensive leather. Calfskin also makes an excellent leather for the uppers. Horsehide is a less expensive material for uppers. It does not possess the advantages of kangaroo or calfskin, but it is serviceable and stands up well. Cowhide makes the best sole leather for football shoes because it is tough, water resistant, and does not readily scuff or crack.

Fiber substitutes for leather should be avoided. Good leather that has been saturated with water will not become mushy or lose its original shape. Shoes with detachable rubber cleats have almost entirely replaced shoes with attached leather cleats. The cleats (male) which screw into the sole are preferable to those (female) which screw into a fixture mounted on the sole.

Helmets. Because of the serious nature of injuries to the head the football helmet is the most important piece of protective equipment. The protection afforded rather than cost, weight, or appearance should be the guide in purchasing this piece of equipment. As soon as helmets do not offer complete protection to the head they should be discarded. Such helmets should never be used for practice or handed down to reserve or freshmen teams.

Helmets are made of a hard, outer shell, usually leather or plastic, which is capable of absorbing the hardest blows without denting.

The shell should be well padded on the inside, preferably with sponge rubber. A web suspension in the crown has become popular because it distributes the shock throughout the helmet. "Helmets which have a canvas, leather, or rubber padding, regardless of their thickness, attached directly to the fiber or plastic shell, furnish less protection to severe jarring than those with an air space between the foundation and the shell."²

Football pants. Football pants are made of a variety of materials. Canvas of eight-ounce weight per square yard has been a very popular material for this piece of equipment. It is a strong, durable material which can be cleaned readily. It is not so expensive as other materials. Whipcord and gabardine cloth are good materials for football pants. If whipcord is heavy enough, it will not pick up water as readily as canvas; it will last longer, take color better, and keep its bright appearance and sheen. The purchase of satin, silk, or balloon-cloth pants is not recommended if service is desired. They make a flashy appearance, but mud and lime, when allowed to dry in them, take out the color and weaken the fabric.

Nylon cloth is being used increasingly for football pants. This material wears exceedingly well, holds its sheen indefinitely, cleans easily, is resistant to moisture, retains shape well, and, at the same time, weighs less than most other materials. Nylon pants are expensive, but in the long run they are economical.

As a policy, the purchase of shell pants will prove more economical if good materials are used. Many schools still use the regular pants with the hip pads attached. This type of pants is wasteful in that it will wear out much more quickly than the pads. It is advisable to buy shells and get good pads for them. The pads will outlast many pairs of pants.

The knees are the weak spots on almost all pants. It pays dividends to buy them with large leather knee pads. The leather should extend almost from seam to seam and come down close to the bottom elastic. The use of an elastic two-way stretch in the back of the pants reduces the strain on the knees and at the same time improves the fit. The crotch also should be reinforced because it is subject to hard wear. Eyelid stays are also important. Stays should be faced

² Virginia Bourquardex, and Charles Heilman, *Sports Equipment: Selection, Care, and Repair* (Englewood Cliffs, N. J., Prentice-Hall, 1950), p. 118.

with leather because laces will wear out the best cloth eyelid holes, and when this happens the pants keep sliding off the hips.

Basketball pants. Basketball pants are usually made from tackle twill (rayon), satin, and cotton. Nylon is not used extensively for this item of equipment. When it is used, the basketball pants should be lined because of the translucency of the material.

Jerseys. Nylon fabric has become very popular for football jerseys. It is usually combined with wool or Durene for this item of equipment. When it is used with wool, the great strength of nylon is combined with the absorption and warmth qualities of wool. It fits well, is elastic, durable, and holds colors well. The Durene-nylon combination provides a lightweight but very strong jersey. It cleans easily, is elastic, and holds its color exceptionally well. Woolen jerseys are warm in cool climates and hold their shape well. They fit well and can be made up attractively in a variety of color combinations. It is a delicate fabric to clean. It is not durable. Like nylon, woolen jerseys are expensive. Knitting mills weave woolen in various grades and mixtures with other fibers in order to combine the best qualities of each.

Cotton football jerseys are used by some schools during the warm weather early in the fall. In the south most of the schools wear the lighter jerseys, usually made up of the high-grade cotton or Durene, which is dressed-up cotton. As cotton is much cheaper than nylon or wool, some schools use cotton jerseys for practice, if handed-down woolen or nylon jerseys are not available. Cotton jerseys are considered best for track.

Rayon is extensively used for track and basketball jerseys. It is usually combined with cotton. It is an inexpensive jersey, holds colors well, is of medium weight, and is easy to clean. Rayon is not a good material for football jerseys because it lacks durability.

White football jerseys are not advisable because they are difficult to keep clean. In addition, they are not so strong as other fabrics since bleaching weakens the fibers. White may be satisfactory for basketball and track but not for football. The raglan jersey, which is designed to fit over shoulder pads without stretching and strain, is favored by many coaches.

are too small the jerseys and T-shirts are easily torn as the players pull them over their heads.

Shoulder pads. Shoulder pads have been greatly improved in recent years. Kapok and foam rubber have replaced felt and rubber as padding. They both are excellent from the standpoint of protection. The foam-rubber pad is considered the best, but it is also the most expensive. It is not so durable as the kapok padding because perspiration causes it to lose its resiliency. For this reason, if foam rubber is used it should be adequately treated for moisture resistance. Kapok is easier to recondition.

The fiber part of shoulder pads (and hip pads) should be water-proofed. Fiber is composed largely of wood pulp and is susceptible to water, just as a piece of stiff cardboard is. Unless the fiber is water-proofed, it will break down if exposed to moisture and will no longer provide protection.

Both types of shoulder pads—the flat and the cantilever—have their advocates. Manufacturers claim that either type will afford equal protection. The fit of the pad is an important consideration. When the pad is placed on the shoulders it should fit snugly. The pads should fit down well over the chest and there should be a strap from the chest to the back protector to keep the pad snug.

Hip or kidney pads. Hip pads must be carefully purchased if they are to fit properly, provide adequate protection, and still not hinder various movements. They must protect the coccyx, the head of the femur, and the anterior-superior spine of the ilium. They are padded like shoulder pads with kapok and foam rubber.

Inflated balls. Rubber balls of all types have been greatly improved in recent years, and since they are appreciably cheaper than leather balls, they have supplanted the latter in many instances. Rubber balls are used extensively in service classes and intramural athletics. Some interscholastic and intercollegiate teams employ them at times for practices. Rubber balls are durable, will not lose their shape, and will not pick up moisture. Because of this resistance to moisture, rubber balls are especially valuable for football or soccer practices which are held in the rain or on a wet field. Rubber basketballs, volleyballs, and softballs are also available.

Almost all leather inflated balls are made of cowhide, which does not stretch as much as horsehide. The difference in prices of footballs, basketballs, volleyballs, and soccerballs is due largely to the

grade of leather that is used. The choice section of any hide is called the *bend*, which comes from the middle of the upper back of the animal. The section immediately surrounding the bend is termed *back* and is considered the second best part of the hide. The fibers in these two sections of the hide are more closely knit, stronger, and more firm than other types of leather. The third best leather is rump, and grouped together as the poorest types are shank, flank, and neck. These sections have fibers of varying lengths and are usually spongy and coarse. The best balls, with close, small, tight, and firm fibers, will keep their shape, but cheaper balls, of inferior leather, will not. One good ball will give greater service than two inferior balls.

Rackets. Rackets are made of a variety of materials. The preferred material for both tennis and badminton frames is well-seasoned, second-growth ash. Both types of frames are laminated. Steel tennis and badminton rackets are available, but apart from their durability, and thus reduced expense, they have no other advantage. Aluminum and fiberglass frames have just been made available, but further experience is needed before they can be properly evaluated. Plastic badminton rackets have also recently appeared, and these seem to be very promising.

Rackets are strung chiefly with gut and nylon. Gut is preferred, but its cost limits it to the most expensive rackets. Nylon has almost entirely supplanted silk for badminton and tennis strings. It stands up well, is not affected by moisture, and is relatively inexpensive. Tennis rackets are strung with 15- and 16-gauge strings; badminton with 19- to 20-gauge strings. By stringing badminton rackets with 16- to 18-gauge strings considerable saving is effected because these heavier strings rarely break.

Shuttlecocks. Plastic shuttlecocks have been sufficiently developed so that they are satisfactory for all but expert players. They are much less expensive than shuttlecocks made with goose feathers. The development of plastic shuttlecocks has been a boon to badminton. Many schools have been able to introduce badminton into the service and intramural programs because of the greatly reduced cost of the shuttlecocks.

The Care of Equipment. A good equipment room is the first essential in the proper care of athletic equipment. A carelessly kept supply room can take a greater toll on the life of athletic equipment

than many hours of hard service on the playing fields because athletic equipment spends most of its life in the equipment room. The equipment room must be conveniently located adjacent to the locker and training rooms. It should be large enough to store all of the equipment of the department adequately and provide sufficient space for the handling and repairing of it. Proper lighting and heating are important. The equipment room ought to be well ventilated, dry, free from sweaty walls and pipes, and protected against moths, roaches, rats, and other rodents. The equipment room should be so constructed that shelves and bins can be built against the walls in order to have articles readily accessible for issue. Fairly deep shelves which will accommodate cartons and bulky articles are necessary. Narrower shelves for shoes and smaller articles are desirable. Enough shelves should be available so that nothing need be dumped in the corners or on damp floors. Steel bins and shelves are recommended. A cage-door, sliding type of window with a counter is necessary.

Every athletic department needs a drying room in conjunction with the equipment room. In almost all gymnasiums there is a corner in which an inexpensive drying room can be built. Placing wet uniforms in a locker after practice or a game will tend to rot the material and to rust the lockers. With the use of a drying room this problem will be solved, and the department will save a considerable amount of equipment. In addition, the drying room is a necessity if the department hopes to launder its own equipment and towels.

A room 3 feet deep, 10 feet wide, and 8 feet high, lined with thin-gauge galvanized iron, can be equipped at a small cost. Galvanized iron pipe is the most satisfactory material for hangers. It is wise to construct a protective shelf of galvanized pipe and wire about 3 feet above the floor to prevent articles from falling on the heating unit. A 7-foot heater, equipped with six equally spaced 600 watt, 220 volt, screw-type electric elements, will supply adequate heat. Excellent ventilation may be assured by cutting eight 3-inch holes in the doors, 4 inches from the floor, and constructing the top of the room in a cone shape, with a small power fan installed in a 6-inch pipe that discharges the air currents out of doors. The fan should run only when the heat is turned on.

A drying room of this size will accommodate training shirts, shoulder harness, sweaters, pants, and socks for thirty-six football

players or the entire uniform, exclusive of training pants, for fifty basketball players.

Equipment Room Management. An equipment room manager is indispensable to the director and coach whose presence is required on the practice field or in the training room when equipment is most wanted by students. The universities and large colleges employ a full-time equipment room manager. A few large high schools are able to afford a full-time manager, but smaller institutions cannot. A part-time custodian may be employed or the janitor may take charge of the equipment. In most high schools the coach must assume responsibility for the equipment room. A common practice, however, is to appoint students to manage the equipment room. In some institutions the students are paid, but in many the students receive a manager's award for their service. Student managers are rarely as capable and proficient as full-time managers, but if they are carefully selected and trained, they will discharge their responsibilities satisfactorily.

If the equipment room manager requires assistance, he may be assisted by the managers of the various sports or by the student assistants. No other students should be permitted in the equipment room. If the equipment manager is to be held responsible for all of the equipment, he and his assistants should handle it alone. When everyone has access to the equipment the manager faces a hopeless task in preventing loss and preserving order.

Issuing equipment. Every piece of equipment issued should be accounted for. A very desirable method of keeping a record of equipment is through the card system. Each student signs a card on which is recorded the equipment issued to him. Every sport has a special card of a different color. On each card are listed the equipment items which are issued for that sport. The football cards may be yellow and the basketball cards white. After each card is signed it is filed alphabetically according to its color. The chart on the following page is an example of a card which might be used.

At the beginning of the school year the equipment manager should assign all lockers, issue equipment to the students upon request of the director or coaches, and handle the daily routine task of managing the towel service. In the course of a season the equipment manager should inspect the playing equipment from time to time. This is done for the purpose of culling all equipment that is

beginning to wear and of saving the athlete from possible injuries. The material that has been culled should be sent to the repair shop immediately. This means of checking and repairing often saves the department considerable money.

CHART 26
Equipment Record

FOOTBALL		
Name _____		Date _____
Address _____		Class _____
Practice	Out	In
Pants		
Shoulder Pads		
Jersey		
Under-shirt		
Sox—Inner		
Sox—Wool		
Supporter		
Stockings		
Shoes		
Special Pads		
Towel		
Sweat-shirt		
Game		
Pants—Rain		
Pants		
Jersey		
Shoes		
Shoes—Rain		
Sox		

Locker
 No. _____
 Combination _____

Checked out by _____
 Checked in by _____

At the end of the playing season the equipment manager and his helpers check in all equipment. This can be done far better by clearing the lockers than by having each player check in his own equipment to the stockroom. There are always some players with more equipment than is charged against them, and this is the best method of securing it. Each piece of equipment, when checked in,

should be tagged with its size and with the former player's name. This saves the manager time the following season in giving it out to the returning players. Each article should be closely inspected, and those needing cleaning and repairing should be cared for at once. An inventory can be taken at this time in order to determine the equipment consumed during the season. A check can be made at the close of the season to see how the equipment has stood up in comparison with other makes during the previous years.

Some schools check each player's equipment into the equipment room daily. Every player is given a number which is the key to the control of this system. This number appears upon the locker to which the player is assigned. It is marked upon each piece of his equipment except the towel, quarter shirt, supporter, and socks, which are called white equipment. The number is also marked on the equipment rack above each player's hook in the equipment room where his equipment is kept at all times. Only the white equipment is retained in the lockers. On reporting for practice, the player comes to the window of the stock room and gives his number to the equipment manager, who goes to the rack and brings the player all the equipment placed under that number. At the close of practice every evening the player returns his practice equipment to the window and the manager replaces it upon the rack. The senior manager checks the equipment displayed under each number daily and, if any is missing, he endeavors to locate it. If any of the equipment is in need of repair, it is attended to immediately. The night before a game the practice equipment is removed from the racks and temporarily stored. Game equipment is substituted in its place upon the racks, and the player follows the same routine on the day of the game as he does for the practice sessions. This is an excellent system of handling athletic equipment, and it is recommended if a large equipment room is available.

combated. This frequently results in lost equipment. In some schools each student checking out an article for free play exchanges it for one of his street shoes which is not returned to him until the borrowed items are returned. All equipment should be numbered and each student should then sign for a numbered item.

Use of equipment. The development of the proper attitude among all students regarding their athletic equipment is the most important consideration in the care of equipment. Much equipment is lost or damaged by carelessness or destructiveness. Frequently, varsity athletes do not feel an obligation to treat equipment carefully. Unless all students have a respect for property and are indoctrinated with a desire to care for their equipment properly, considerable unnecessary damage and loss will be incurred. Students must appreciate the fact that athletic equipment is loaned and not given to them and that they are responsible if it is lost. Petty thievery can best be combated by making each player accountable for everything checked out to him.

Marking equipment. All athletic equipment of an institution should be marked in some way in order to identify it. The usual way of doing this is to stencil or stamp the name or initials of the school on the equipment. In addition, athletic clothing should have the sizes clearly indicated on them. The identification of the school on athletic clothing does not suffice; the items issued to each player should be numbered and the numbers recorded in the equipment room. This is additional bookkeeping, but it helps to trace missing articles. When this system is known to all the students within a school, it reduces the amount of stealing.

Cloth articles may be successfully marked with a stencil and stencil paint or an India ink stamp. Leather goods can be stamped. In some institutions initials are burned into leather goods, but unless this is done carefully, the leather will be damaged. Wooden items of equipment can be marked by burning initials at some convenient spot. Identification labels can be sewed into some articles. Many items of equipment may be purchased already marked. An additional charge is usually made for this service. It has been found, however, that it is more economical to purchase sweat socks with some mark of identification than to have it done within the equipment room.

Care of Specific Types of Equipment. It stands to reason that not all athletic equipment can be treated, cleaned, or stored in the same way. The materials from which the equipment is made—leather, rubber, fabric, wood, and so forth—require different methods of care. If the persons using it are to get the maximum service from the equipment he orders, the athletic director and his assistants must be familiar with the manner of caring for the various types of apparatus on hand.

Leather balls. The vulnerable part of any leather ball is the stitching. The stitching can be protected by relieving the pressure inside the ball between seasons. Slowly drying the ball when it is wet rather than forced drying will also protect the stitching. When inflating a ball with a rubber core valve, always moisten the needle, preferably with glycerin. If the needle is moistened with the mouth, remove the moisture from the needle after using it. A rusty needle will injure the core of the valve. The needle should be inserted with a gentle, rotary motion. A pressure gauge should always be used to insure correct inflation. A chart should be available next to the pump or on the wall to indicate the desirable air pressure for the different type of balls. Overinflation should be avoided, inasmuch as it strains the fabric lining and thus affects the shape and life of the ball.

A ball which has been used in the mud should be wiped clean with a damp cloth and then dried at the normal room temperature. Leather balls should never be placed near a radiator or hot-air register. To clean a ball which has been discolored commercial cleaners or saddle soap are recommended. When the leather of a ball has become harsh and rough because of repeated exposure to moisture, an application of a commercial leather dressing or a light mineral oil will prove helpful.

Leather balls should be partially deflated when stored away between seasons. They should be stored in a cool, dry place without objects of appreciable weight upon them.

Rubber balls. The chief enemies of rubber are direct sunlight, heat, grease, and oil. With regard to sunlight and heat, all that can be done is to avoid exposure when possible. Grease and oil should be removed with soap and warm water. Dry-cleaning fluids should never be used on rubber goods. Rubber balls should be stored in a cool, dry bin or box away from heat or sunlight.

Textile fabrics. Bourquardez and Heilman have made a thorough study of the care of textile fabrics. Their recommendations are indicated in the table on pp. 414-415.*

All woolen items must be protected against moths. Moths will not attack nylon or cotton fabrics. After jerseys are cleaned, they should be stored away by sizes. They should not be stored in open bins where dust will collect but in closed containers with moth repellent.

Leather goods. The most common sources of trouble with leather goods are high temperature and excessive moisture. There are three types of formations which accumulate on leather, only one of which is harmful. This is green mold which rots leather. In order to prevent green mold rot, leather articles should be kept in a cool, dry place. When wet, leather equipment should be dried immediately, but the action should not be forced. The article should be dried at normal room temperature without the use of artificial heat. Sun drying and air streams or pressure should never be used.

The proper care of leather shoes is especially important. They are subject to dampness due to perspiration, rain, or snow. This condition tends to remove the tanning oil from the leather, causing it to dry out and crack. In addition, shoes if worn when very wet become misshapen. In caring for wet shoes, lime and mud should first be removed. Warm water should be used if necessary. Oil or grease should then be applied and worked into the leather. Castor oil is especially recommended. If the oil is warmed before application, it is more efficacious. Oil should be applied to the uppers, and wool grease to the soles. It is important to keep oil and grease away from rubber cleats. Wearing football, baseball, and track shoes on stone or concrete floors should be discouraged.

Before leather shoes are stored away after the season they should be cleaned and oiled. They should be oiled again about the middle of the year. The toes should be stuffed with paper to help the shoe retain its shape. The shoes should be stored in special compartments to promote air circulation and to avoid crushing.

Wooden equipment. Wooden equipment, such as bats, golf clubs, hockey sticks, javelins, bows, and lacrosse sticks, are built to last for long periods of time and will do so when properly handled. Moisture is the main source of difficulty. It will damage the wood where the finish has worn away. Consequently applications of warm

* Bourquardez and Heilman, *op. cit.*, pp. 275-276.

Hang on smooth surface; hooks, knobs, etc. may damage.

Ironing

Check small, inconspicuous section for correct ironing temperature if this is unknown.

Dampen slightly (most fabrics).

Use smooth, even pressure.

Use a hot iron if necessary.

Use a warm not hot iron (rayon temperature for ironing is suitable).

Do not use bleaches. Dry in natural heat, not in hot oven.

Iron with warm not hot iron. (Rayon ironing temperature is suitable).

Use warm not hot iron. Iron on wrong side. Iron when nearly dry except: rayon-wool, iron when dry; rayon-other fibers, iron when damp; rayon sharkskin, iron when noticeably damp.

Iron through a cloth placed on wrong side of garment.

Storage

Remove starch unless starch is guaranteed not to weaken.

Be sure garments are clean and dry.

Inspect for moths and other insects.

Store in cool, dark place, protected from dust and dirt.

Spray storage area occasionally with effective mothproof agent.

Store in relaxed position, not under tension.

Treat with mothproof agent before storage unless garment is mothproof.

Special Considerations for Knitted Fabrics

Repair runners at once.

Measure before laundering (unless garments are shrink-proof).

Dry on a flat surface (do not hang up).

Do not use pins on these fabrics.

Lay flat when storing.

Special Considerations for Pile Fabrics

Do not iron some pile fabrics (unnecessary). Expose reverse side of corduroy and velvets to steaming water. When dry brush pile side in direction of pile.

linseed oil are recommended whenever the finish of the wood requires it. Javelins and vaulting poles should be stored in such a manner as to prevent warping. Storage of wooden equipment in a cool, dry place is recommended.

Nets and rackets. Nets which are exposed to dampness will rot. Nets which are used outdoors should be tarred. If they are dipped in creosote every year, their life will be prolonged. They should be taken in during bad weather, kept dry, and repaired at the first indication of damage. If space is available, it is better to hang tarred nets on pegs in a cool, dry area rather than fold or roll them. Badminton and tennis rackets should always be kept in presses when not in use. Restrunging is much less expensive when it is done immediately after a string has been broken. Probably the greatest source of racket problems is too great string tension. This condition greatly increases string breakage and loss of shape of frames. At the same time it does not improve the performance of the poor and average players. Expert players use tightly strung rackets, but such equipment is neither necessary nor desirable in physical education and intramural activities. A tension of from 50 to 60 pounds is adequate for such use.

Badminton shuttlecocks. Badminton shuttlecocks should be kept in a moist environment. The feathers lose their oils in a dry atmosphere. A humidifier is recommended for the storage of a considerable number of shuttlecocks. The greatest damage to shuttlecocks comes through careless use. Students should not be permitted to abuse this fragile equipment. Shuttlecocks are also saved when students are prevented from smashing and swinging vigorously until they have developed proper skill and timing.

Archery tackle. All bows should be unstrung when not in use. On the archery range the bow should be hung on the ground quiver between rounds. When not in use, the arrows should be racked in a dry place. The rack should be so constructed that there are three pressure points on the arrow—one two inches from either end, and one in the middle—to prevent warping.

Helmets. Helmets should be cleaned before they are stored away. Dirt and hair oil should be removed by using saddle soap or a commercial ball cleaner. In storing helmets the important consideration is to maintain their shape. Throughout the year they should be carefully stored on special racks, or they may be stuffed with

newspaper with head trees on the inside and suspended from wires close to the ceiling. They should not be hung by the chin strap. Helmets should not be crushed by having heavy objects placed upon them or by having individuals sit upon them. Throwing helmets is also a practice which should be prevented. The common practice of carrying helmets in a duffle bag is not recommended.

Hip and shoulder pads. These items of equipment should be cleaned and repaired before being stored. Hip and shoulder pads can be washed with warm water and soap if care is used to avoid getting too much water into materials, such as kapok, which absorb it. Leather parts should be lightly oiled after cleaning. Special forms are easily made upon which shoulder pads may be stacked. Stacking pads more than five or six high will spread the arches of the bottom pads to the point where they lose their body-conforming shape. If space is available, open wooden racks to accommodate not more than two pads to each space is the ideal arrangement. Hip pads should be hung by the belt loop.

Mats. The two common practices which are harmful to gym mats are rolling or bending them in any way and dragging them on the floor. Mats should always be kept flat. When they need to be moved they should be carried by the handles or transported on a mat truck.

Canvas mats should be cleaned once a month with a vacuum cleaner. If they are heavily used and become grimy, they should be cleaned with a commercial mat cleaner. Tears in the body or the handles and broken tufts should be repaired immediately. When the mat cover is beyond repair, it is less expensive to have it recovered than to purchase a new mat.

Track equipment. Metal shots should be cleaned with steel wool and oiled before being stored away. Steel tapes should be treated similarly. Discuses should be cleaned and shellacked, then placed in a rack, and stored in a room that is not overheated. Javelins should always be hung from a height with the point downward to prevent warping.

Cleaning Uniforms. The great majority of institutions must rely upon commercial cleaners to launder their athletic uniforms. This is a specialized type of work which requires trained personnel and proper facilities. The athletic director would be well advised to seek a cleaner who specializes in this type of cleaning.

Athletic uniforms are among the most difficult to clean garments

known to the cleaning industry. They are subjected to dirt, perspiration, rough usage, and a variety of stains—grass, blood, resin, iodine, and adhesive tape. In addition, practically all items of the uniform consist of two or more fabrics, each of which may require separate handling.

Sporting goods manufacturers recommend that the athletic director take a complete uniform to the cleaner in advance of the season to prepare him for the type of cleaning it will require. If the cleaner knows the fabrics involved in the various parts of the uniform, whether or not rubber is used, and the color fastness of the garments, he is much more likely to clean it properly.

Repairing Equipment. Athletic directors would profit by investigating thoroughly the possibilities of repairing their own equipment. The extent to which it should be repaired depends upon the size of the school and amount of athletic equipment handled. In some of the larger institutions the stockrooms are so completely equipped that all athletic equipment can be repaired. The practice in the majority of schools is to make simple repairs and to send the remainder to local repair companies or national reconditioning concerns. Many schools could cut their equipment bill appreciably by enlarging their repairing facilities.

A sewing machine that can sew leather as well as textile materials is indispensable in the equipment room. Such a sewing machine will more than pay for itself in a short time by mending the rips and tears which occur so frequently in all types of athletic materials. Special facilities for sewing footballs, basketballs, and baseballs by hand should be available also. Another excellent way to repair rips and tears in cloth or canvas is by Lam-A-Fab, a newly invented liquid fabric cement. Anything made of fabric is quickly, cheaply, and permanently repaired by this product. It is particularly useful in repairing gymnasium mats.

one shoe is useless for further wear, its mate is still in fair condition. These odd shoes should be saved for replacements.

Common sense must be used in repairing equipment. Up to a certain point it is good economy to recondition athletic materials, but beyond that it is a waste of money. Some directors make the mistake of repairing old equipment that will not give them enough service to pay for the repairs made. It is more advisable at times to sell old equipment to cleaning and reconditioning firms and apply the money to new equipment.

In the great majority of schools only minor repairs can be made on athletic equipment. The practice has developed of sending all equipment in need of repair to special equipment reconditioning companies. A number of these have developed in all sections of the country. Originally, many of these firms were not adequately prepared to do effective work, but most of those which have survived have developed the personnel, the specialized equipment, and the technical skill to do a superior job of reconditioning athletic equipment. It is the experience of most athletic directors that in the long run it is more economical to turn over the bulk of the repair work to reputable concerns of this type.

School Laundry. The great amount of laundry service which physical education departments need every year, particularly for towels, runs into large sums of money. More and more schools are finding they can reduce this expense considerably by installing laundry units and doing their own laundry. All that is necessary is the purchase of a good washing machine and dryer. The work of laundering the equipment can well be done by the equipment manager, the custodian, or student help.

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Public Relations in Physical Education

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What Is Public Relations? The modern concept of public relations has emerged from the term *publicity*. Schools have been concerned with publicity for many years, but experience has shown that much more than publicity is needed to secure public understanding and support. Public relations is much broader than publicity. Although publicity is its major tool, public relations is concerned with *all* the impressions that people receive rather than those obtained only through the various publicity media. Fine points this out in his definition: "Public relations is more than a set of rules—it is a broad concept. It is the entire body of relationships that go to make up our impressions of an individual, an organization, or an idea."¹

In addition to the information which is transmitted via newspapers, radio, films, television, annual reports, and demonstrations, public relations for physical education involves all the relationships which the various staff members have with students, parents, other teachers, administrators, school board members, and the general public. It also involves the impressions obtained from the secretary, custodian, equipment room manager, and any other personnel associated with the physical education department. It even includes the visual, auditory, and olfactory impressions received from the athletic fields, gymnasium, swimming pool, and locker and shower rooms. As Fine has indicated, it involves "the entire body of relationships" associated with physical education.

Purposes of Public Relations in Education. Inasmuch as the public schools are supported by taxation an obligation exists on their part to give an accounting of their activities to the public. The schools belong to the people. The public invests heavily in education, and the citizens are entitled to know what is being accomplished with their money. In addition to discharging this responsibility to the public, the schools find it necessary to keep the people informed about their activities in order to obtain the kind of support needed to maintain a high level of efficiency. The cost of public schools is the largest item in municipal budgets, but as long as public confidence and support are maintained this expense is cheerfully borne. Harral points out:²

Administrators and others must strengthen their public relations programs. Education will meet current needs only as the masses of people—the throngs who keep the wheels of society moving—understand the schools and take an active interest in supporting them. Upon the attitudes of the public and its willingness and ability to provide the revenues, the development of education in this country depends. As long as education justifies itself in the minds of those who are instrumental in financing it, the financing will continue. These are bedrock considerations.

Still another purpose of public relations is to rectify mistakes, to clear up misunderstandings, and eradicate negative and antagonistic attitudes. These conditions always exist in the general public, and they are powerful deterrents to good will. It is particularly important to influence these individuals favorably, because they might otherwise become leaders of attacks upon the schools.

Relationship of Physical Education to the Total Public Relations Program. Inasmuch as physical education is a part of education, all that has been said regarding the need and importance of public relations for education in general applies to physical education. Physical education must participate in the total program of public relations in whatever ways it can. By the very nature of its activities, physical education has many phases in which the community is vitally interested. Close co-operation with the person responsible for the public relations of the school or school system—if there is one—will be mutually advantageous. Physical educators can suggest

² Stewart Harral, *Tested Public Relations for Schools* (Norman, Okla., University of Oklahoma Press, 1952), p. 4.

activities of potential public relations value, and, at the same time, they can receive suggestions to improve the public relations of the physical education department. The individual responsible for the public relations program of the school or school system usually has more specialized preparation in this area than the physical educator. He is the person to whom the physical educator can look to for guidance and assistance.

Need and Importance of Public Relations in Physical Education. It has been pointed out previously that an obligation exists on the part of all public agencies to report periodically to the community. It was also pointed out that continued public support depended heavily upon an effective public relations program. As Harral says: "public relations seeks to bring about a harmony of understanding between any group and the public it serves and upon whose good will it depends."²

Of all areas of public schools, physical education, particularly, needs to bring about "a harmony of understanding" among parents, teachers, school administrators, and other citizens in the community. This need stems from the fact that the philosophy, activities, and methods in physical education have changed so greatly in the past two decades that few adults understand and appreciate present-day programs. Most people react in terms of their own experiences. When they recall the physical education they themselves endured, they are not disposed to tax themselves heavily for it.

Far too few physical educators have concerned themselves with reporting and interpreting physical education to the public and school administrators. They have only themselves to blame when the public is unwilling to provide adequate financial support for this phase of the school curriculum. During the depression years of the thirties physical education was eliminated or greatly curtailed in hundreds of communities. School boards and school administrators, when confronted with the problem of operating on reduced budgets, too often considered physical education as a "fad and frill" and acted accordingly.

As education faces unparalleled expansion in the years ahead because of the skyrocketing enrollment, physical education faces a challenging situation. When school costs are increasing so enormously,

² Stewart Harral, *Public Relations for Churches* (New York, Abingdon-Cokesbury, 1945), p. 7.

all items in the educational budget are being scrutinized with great care. Any program or service which cannot be justified in terms of its contribution to the welfare of school children will have difficulty in surviving.

Physical educators must justify their existence. It is unfortunately a fact that physical education facilities are the most expensive "class rooms" in our schools. School administrators, school boards, parents, and the general public must be convinced that the funds expended upon physical education pay rich dividends. When these groups understand what physical education can contribute to children in terms of health, vitality, physical fitness, citizenship, sportsmanship, and happiness, adequate support will be forthcoming. Parents will pay for what they want for their children. They always want the best and will unstintingly support what they are convinced is desirable. But they must be convinced.

Responsibility for Public Relations. The physical education administrator is responsible for the public relations of his department. In fact, this is one of his most important responsibilities. Whether he wills it or not, he and the other faculty members, the school secretary, custodian, and equipment room manager are all involved in public relations in every contact they have with other people. Since these contacts have significant implications for the department, it is the responsibility of the administrator to concern himself with them and to do everything within his power to assure that the over-all effect will be favorable and enhance the program. Good public relations aid and abet the physical education program; poor public relations damage and, in some cases, bring about the elimination of the program.

Although the central authority for public relations must reside with the administrator, every worker within the department must share in the responsibility. In his associations with others each staff member is creating attitudes in their minds toward physical education. One staff member is capable of doing more damage to public relations than can be overcome by all the remaining staff members. A good public relations program must be a team effort.

Principles of Public Relations in Physical Education. In this section we shall list and discuss six principles which constitute a sound basis for any public relations program in physical education that is going to be effective.

1. *The public relations program must be based upon truth.* All facts, data, and interpretations that are reported to the public must be presented impersonally, unselfishly, and honestly. By the very nature of public relations any misrepresentation will inevitably create adverse public opinion.

2. *The best foundation for good public relations is a sound program.* The most elaborate public relations program cannot cover the basic defects of a poor program. It should never attempt to do so. The first step in successful public relations is a physical education program which is making a genuine contribution to the lives of students. A limited, poorly taught program can have no other result than bad public relations. The following statement emphasizes this point:⁴

When the public relations program of a school system rests on a foundation of sound classroom accomplishment, it is like a house built upon a rock. Storms of ill-founded criticism and innuendo will not overwhelm it. Its foundations are sure. On the other hand, the most systematic and skillfully devised publicity cannot maintain the public's confidence or win its approval for a school program that is fundamentally unsound. No shoring up "interpretation" can permanently conceal the shortcomings and failures of misdirected or ineffective teaching. Public relations, under such circumstances, is built on shifting sands. The public cannot hear what is said because it is so acutely aware of what the school program is—or is not.

In this connection it should be pointed out that the program can be far from ideal and still develop good public relations. In schools which have limited facilities, equipment, and time, and large classes, no one expects the physical educator to accomplish what could be done under ideal circumstances. The criterion, however, is how effective is the program *under the circumstances*? In any given situation a superior teacher will produce better results than a poor or mediocre teacher. Many physical educators have obtained improved facilities, equipment, and time allotment because of the excellent public relations that developed from a program which was as good as it could be under unfavorable circumstances.

3. *The public relations program should be continuous.* Unfortunately, very few physical educators have any definitely planned public relations program for their departments. What few programs

⁴ American Association of School Administrators, *Public Relations for America's Schools: Twenty-eighth Yearbook* (Washington, D. C., 1950), p. 59.

do exist are usually of the campaign type, which are not considered as effective in molding public opinion as is a continuous program. The common practice has been to neglect the public relations program until an emergency arises and then to conduct an intensive campaign to secure public support. Although this procedure has some value, it so resembles propaganda that the public develops a more suspicious, defensive attitude than it would if it were supplied regularly with information. Campaigns are more successful if the public has been educated by a continuous program of public relations.

4. *Public relations is a two-way process between the community and the schools.* The concept of public relations wherein everything originates within the schools and flows to the public is a limited one. The public is capable of providing more than mere financial support, as important as that is. The trend is toward genuine co-operation in planning and working for good schools, with the public giving as well as receiving the ideas. Mutual understanding and teamwork between the community and the school gives laymen greater confidence in their schools. In addition, parents are led to a better understanding of the role of the home, the community, and the school in the whole program of education.

A committee of fourteen school administrators made the following observation about public participation in school affairs:¹

The significance of public participation in educational planning is that it represents one of the most effective means of helping people talk through the problems of education. Citizens come together to explore, plan, and think through and solve educational problems in co-operation with the board of education and the professional staff. In this manner, by digging deeply into the rich strata that are basic to good education, the individual will grow in experience and knowledge. His view of education will be more complete. From these co-operative experiences will come understandings which lead to better support for the schools and an improved school program.

One of the most promising trends in physical education is the development of physical education advisory committees. In some

¹ *Public Action for Powerful Schools*, Metropolitan School Study Council Research Studies (New York, Teachers College Bureau of Publications, 1949), No. 3, p. 4.

school systems (such as that of Arlington, Va.) these and similar committees are in operation for a variety of school areas. The committees are considered school board committees, and each member is invited to serve each year, by a letter from the chairman of the school board. The decision concerning membership of the various committees is made after consultation by the superintendent of schools, the supervisor of the area concerned, and the chairman of the board. The membership consists from twenty to thirty members, one third of whom are school personnel. The lay members are men and women and represent a cross section by occupation and geographical area throughout the system. The school people also represent a cross section of school personnel, that is, men and women, elementary and secondary teachers, and administrators. One school board member is assigned to each committee. The supervisor of the area is secretary for the committee and provides leadership and direction. The chairman is elected by the group.

The physical education advisory committee is informed of the work of the past committees and the needs and problems of the physical education service, intramural, and interscholastic athletic programs in all the schools. Problems are discussed, study groups formed, resolutions passed, and the minutes provided for the superintendent, who transmits the committee's resolutions and recommendations to the school board.

5. *A knowledge of what the public thinks about the schools is essential.* The more school personnel know about the level of understanding and attitudes of the public in regard to the schools, the more intelligent and effective will be the public relations program. Thus, schools have been making increasing use of opinion polls. The advantages of knowing the areas of ignorance and misinformation in the community, the prevailing opinions and attitudes on educational matters, the views of particular groups, and the obstacles which need to be overcome before certain proposals can be implemented are obvious.

This principle has particular implications for physical education. Because of the great changes in philosophy, objectives, programs, procedures, and evaluative techniques in the past twenty-five years, it is probably true that the adult population has a more erroneous impression of physical education than any other subject area within the schools.

6. *The effective public relations program involves all school personnel.* Schools could learn some valuable lessons from business organizations regarding the orientation of all personnel in their public relations responsibilities. The most successful stores devote much effort in training clerks, secretaries, floor walkers, elevator operators, and other personnel to work successfully with people, yet in most schools there is an assumption that everyone will automatically practice good public relations. Good public relations do not happen in the normal course of events; they are the result of a well-planned program, intelligently and continuously executed. The quality of the public relations program is commensurate with the effort put into it.

Relatively few physical education departments have a planned public relations program. Only rarely is this subject discussed in staff meetings or included in departmental policies. Seldom is an organized effort made to familiarize the teaching staff with desirable public relations procedures. Even though there is abundant evidence to the contrary, the presumption apparently exists that teaching personnel always practices good human relationships. The non-teaching personnel, such as the stenographer, clerk, secretary, custodian, and equipment room attendant, are important from this standpoint; yet few efforts are made to assure that they treat students, faculty, and the general public in a courteous, dignified, and friendly manner. A brusque secretary or telephone operator, a dirty or unshaven custodian, an uncouth and inconsiderate equipment room clerk can do great damage to the reputation of the physical education department.

Planning and Organizing the Public Relations Program. A number of factors need to be considered in establishing a public relations program within a physical education department. These factors will depend upon the size of the department and upon the existence of an on-going program for the entire school system as well as the specific school. The most important considerations involved in planning and organizing a public relations program are:

1. The specific purposes of the program should be indicated. These purposes should be discussed and approved by all members of the staff. Unless there is unity and support for the program by all staff members, there is not much point in initiating such a program.

2. The past and present policies and procedures need to be evaluated in terms of the effects which they have had upon the public relations of the department. Data should be collected from students, alumni, parents, faculty, and other groups regarding their reactions to these policies and procedures. Factors which produced misunderstanding and resentment must be eliminated.

3. In the larger departments the best-qualified person should be designated to assume the responsibility for the program. In the smaller departments the physical education administrator must undertake this assignment himself. There are specific duties which must be regularly performed and others which occur at irregular intervals. When one individual has these duties as part of his responsibility, they are more likely to be done promptly and efficiently. Often everyone's responsibility becomes no one's responsibility.

4. If the school or school system has a definite public relations program, the efforts within the physical education department must be integrated with it.

5. The facts to be emphasized in public relations should be determined. In making this selection a public opinion poll might prove very helpful. The decisions concerning features to be emphasized should be made by all staff members.

6. All media for disseminating information should be employed. The various groups within the general public of greatest concern to physical education should be reached by the most appropriate means of communication.

7. The results of the public relations program should be checked from time to time. Such an evaluation is necessary to guide future efforts and to assess what has been accomplished.

8. The entire staff—nonteaching as well as teaching personnel—must be "public relations conscious." Each should know his responsibilities and limitations in the program.

Multiple Publics. There is no one public. Formerly, the idea was held that a school or department had relations with a "public." We know now that there are many publics differing in size, organization, interests, methods of communication, and systems of control or guidance. Every religious, political, service, social, and professional organization constitutes a public. Every individual is, ordinarily, a member of several publics.

This concept of publics is important in public relations because the approach to a specific group depends upon its nature and interests. A successful approach to one group may prove ineffective with other groups. One of the lessons which specialists in public relations have learned is that the various media of communication

must be planned for specific groups—a shotgun approach is of dubious value.

Insofar as physical education is concerned, the important publics are students, parents, other teachers, school administrators, school board members, press, radio, and television personnel, and representatives of related governmental and social agencies. Each of these groups will be considered in greater detail.

Students. By all odds, the most important group from the standpoint of public relations is the student body. Two reasons exist for this situation. In the first place, student reactions to physical education powerfully affect the opinions and attitudes of parents, other members of the family, and friends. Each pupil is a daily reporter on what happens in his physical education relationships. What he thinks and says about his school work and his teachers is extremely important. If he is happy and successful in his relationships, he is a booster for the program. No more effective approach could be made to his parents. Even though his parents might have had a negative or antagonistic attitude toward physical education, they become ardent supporters when his reports are enthusiastic and favorable. The instances are legion where parents, convinced of the importance of physical education for their children, have used their influence to bring about improved facilities, equipment, class size, and time allotment. The correlation between *pupil approval* and *public approval* of physical education is very high.

The second reason why students represent such an important group is that they are tomorrow's public. They eventually become the parents, doctors, lawyers, businessmen, school administrators, congressmen, politicians, public officials, college presidents, school board members, and the like. Their attitudes toward physical education are conditioned largely by their own school experiences. Individuals who strongly support physical education and others who are bitterly prejudiced against it are found in every community. To some physical educators belongs the credit for the friends and supporters who have been created; others are responsible for the enemies.

Unfortunately, much harm has been done to physical education in various states and communities by individuals who were antagonistic to it. Some of these individuals obtain positions of power and influence which they employ to the detriment of physical

education. Back of the defeats and setbacks which physical education has suffered is the failure of one or more physical educators. Every student who is slighted, neglected, humiliated, or otherwise mistreated, who is frustrated and unhappy in his experiences in physical education, has been adversely affected. When he graduates from school, if the sum total of his impressions is negative, he can hardly be expected to be an enthusiastic supporter.

Parents. The importance of this public has already been emphasized. It has also been pointed out that the support of parents can be obtained by providing them with an excellent program while they are in school and by contributing positively to the health, fitness, skill development, social adjustment, and recreational competencies of their children. Additional ways of increasing the understanding and appreciation of parents are also available to the physical educator and should be utilized.

Administrators have learned that much more needs to be done to educate citizens about their schools. Many of the problems with which education is confronted are due to the ignorance or misinformation of people. Increasingly schools are teaching students about their schools in simple, nontechnical terms—their place, values, organization, operation, and sources of support. Units of study about the school itself merit consideration, along with units on other community agencies and institutions. Children should be educated to understand and appreciate the services of teachers no less than those of policemen, firemen, and postmen.

Such a program would be valuable insofar as physical education is concerned. If high school and college students were taught something of the nature and purpose of physical education, it would do much to spread understanding about this aspect of the curriculum. They would not only communicate what they learn to their parents, but they would also acquire a greater appreciation of its benefits which would carry over into adulthood.

Parents can also be educated via reports, visits to school, demonstrations, parent-teacher meetings, and various types of publicity. The features which are reported are dependent upon what the people want to know about physical education and what they should know. They should know that modern physical educational philosophy no longer conceives of the school as being concerned only with the "three R's" or preparation for a vocation. They should

realize the increasing need for physical education—a need which cannot be adequately served by any other agency in the school. Once they have been convinced of its indispensability, they should know how it fulfills its purpose in an educational institution. In other words, parents should be educated to know the objectives of physical education and the means by which they may be attained. They should know about physical education operating at its best.

The major interest of parents in physical education revolves about their children. They are eager to know the progress and achievement of their boys and girls. If a student is not making satisfactory progress, his parents want to know why and what might be done to remedy the situation. They are interested in the course of study and the values of the different activities to their child. They might have questions about the teaching procedures and methods of evaluation which are employed. The health and physical fitness of their boys and girls is a matter of vital concern to all parents.

It appears that what parents want to know about physical education corresponds very closely to what they should know. The following items, which are based on the parents' interest and need for information about physical education, are suggested as being of most value for publicity purposes:

1. The progress and achievement of their children.
2. Methods of instruction.
3. Health and physical fitness of their children.
4. The program of activities.
5. Need for physical education.
6. The objectives of physical education.
7. Intramural athletics.
8. Teachers of physical education.
9. Physical education facilities.
10. Attendance and behavior of pupils in physical education.

Other teaching personnel. Another important public for physical education consists of the other teachers within the school system. Good public relations with this group pays valuable dividends. When they comprehend the nature and purposes of the program and are sympathetic, they can be very helpful in interpreting it to students, parents, and the general public. In their advising and counseling functions they can be more helpful to both the students and the physical education department. Also, if they are favorably

disposed toward physical education, they are unlikely to vote for school policies and regulations which are inimical to it.

Physical educators can win the support of the other teachers in a number of ways. The most important step toward this end is the development of an educationally respectable program—one which merits a place within the schools. Teachers usually obtain from their students a fairly accurate impression of the physical education program. An excellent program will gain their respect. Other teachers admire physical educators who are educators—who exert a wholesome influence upon their students. They lose their respect for physical education when questionable practices which teach youth undesirable lessons are tolerated.

Physical educators must also play their role as teachers. They should attend faculty meetings, PTA meetings, and other school functions. They should demonstrate interest in all school activities and should avoid conveying the impression that they are a group set apart from the other faculty. The more they associate with other teachers professionally and socially, the better will their public relations be with this important group.

The support of all faculty members for the interscholastic and intercollegiate athletic program is invaluable, and the co-operation of most of them can be easily gained if the athletic director and coaches demonstrate interest in and support of the purposes of the school. If every effort is made to conduct the athletic program on an educational basis the respect of most of the faculty will be forthcoming. However faculty members resent pressure from coaches to grant unwarranted concessions to athletes. They dislike overemphasis upon winning, with its concomitants of poor sportsmanship, excessive demands upon the time of the students, and the debasement of academic standards. Other faculty members admire and support the coaches who attend faculty meetings and other staff functions, who consider themselves a part of the school team and co-operate with school policies and purposes, and who are always more concerned about the welfare, character, and ideals of their athletes than anything else.

School administrators and school board members. This is a small but very important public. The status of physical education within a school or a city system can be drastically affected by this group. When the individuals involved become convinced that physical

education merits an increased time allotment, more teachers, an additional gymnasium or swimming pool, the improvements are usually not long in forthcoming.

Physical educators can win the support of their principals and superintendents if they become part of the team in trying to accomplish the purposes of the school. School administrators want loyalty and co-operation from their teachers. They do not want teachers who are apparently working toward objectives which have no relationship to those of the school system.

School administrators and school board members are sensitive to public opinion. The best way to win their support is to have favorable information come to their attention from students, parents, other teachers, and the various publicity media. The combination of a good program and good public relations will usually produce the desired results. It is also helpful if the physical educators conduct an effective program of evaluation with which they can demonstrate objectively how the children in the program have developed. An annual report which cites the progress and present status of the program and indicates the needs and problems is invaluable in interpreting the program to this particular public.

Members of the press, radio, and television. The importance of these publicity media emphasizes the necessity to work co-operatively with their representatives. The publicity they can disseminate is invaluable, and the only cost is the time required to co-operate. Physical educators should take full advantage of this opportunity and assist the representatives of these communication media in every way possible. Another important consideration is to treat all individuals concerned impartially. The surest way to damage public relations with personnel of the press, radio, and television is to show preference to one or another.

Representatives of government and social agencies. Good public relations should exist between physical educators in the schools and those in other agencies in the community, such as the Y.M.C.A., Y.W.C.A., boys' clubs, and the municipal recreation department. It is mutually advantageous to all to work co-operatively with each other. Facilities, equipment, and personnel may be shared on occasions. Programs may be co-operatively arranged. Most important of all, perhaps, is the banding together of all professional people when certain emergencies arise. When physical education in the schools

is under attack, the personnel of other community agencies can be of invaluable assistance.

The Teacher's Role in Public Relations. In the daily interaction of pupil and teacher the most lasting and vital public relations are undoubtedly built. Certainly the teacher has the most associations with pupils, and he works more directly and intimately with them than do nonteaching personnel. Consequently, the intrinsic value of teacher-pupil relationships is a major factor in the school's public relations.

Physical education teachers have exceptional opportunities to contribute to the wholesome development of their pupils. The activities are exciting and challenging, and students are enthusiastic about them. The goals—health, physical fitness, skills, wholesome recreation, social adjustment—are vitally important and esteemed by parents and pupils alike. With these advantages, physical education teachers are strategically situated to develop outstanding public relations.

Unfortunately, these opportunities are often ignored. Not at all uncommon in physical education are certain undesirable teaching practices and procedures. Among those faculty members who may irrevocably damage the department's public relations are the following:

1. The teacher who tosses out a ball and leaves the area.
2. The teacher who offers the same activities year after year without progression or change.
3. The teacher who ignores the weak and inept to concentrate upon the superior performers.
4. The teacher who never teaches systematically.
5. The teacher who exploits his physical education classes to locate and develop varsity performers.
6. The teacher who is sarcastic, abusive, and impatient.
7. The teacher who concentrates upon only one objective of physical education to the exclusion of the others.
8. The teacher who is dirty, unshaven, or slovenly in appearance.

Such teachers have a devastating effect upon public relations. Students, parents, other teachers, school administrators, board members, and the general public have nothing but scorn and disrespect for this type of physical educator.

Studies have been made which show the characteristics which students most esteem in their teachers:

1. They like a teacher to be fair and firm, with no favoritism to any pupil or group. They resent teacher bias. Often teachers are adjudged unfair because of an inadequate understanding of their motives. Teachers should be alert in discovering and remedying misconceptions that occur.
2. They like a teacher to be sincere. It is impossible to teach successfully what one fails himself to practice. Courtesy will not result if the teacher is discourteous. Good sportsmanship cannot be expected if the teacher or coach endorses an illegal play or unsportsmanlike tactic. Pupils quickly discover whether a teacher sincerely believes in and practices such virtues as honesty, courtesy, loyalty, good sportsmanship, and charity.
3. They like a teacher who has an interest in them. They resent being ignored or "brushed off." The informal relationships in physical education provide an ideal setting for students to talk with their teachers about their daily work, studies, future problems, or hobbies. Physical educators can be very effective counselors if they are willing to take the time to talk to their students.
4. They like teachers who make learning interesting. They prefer teachers who motivate learning, who have patience and give them additional assistance, who help them evaluate their progress. They like teachers who are considerate of the opinions of student and who make learning a joint endeavour.
5. They like teachers who know their subject. They quickly discover the teacher who is poorly prepared, and they soon lose respect for him.

Some physical education teachers confine their human relations to the classroom. They hold themselves aloof from the community and its various organizations and groups. This is unfortunate from a public relations standpoint. A community likes a teacher, particularly a physical education teacher, to participate in community activities. The people want the teacher to fit in, to observe their customs and traditions. That a teacher's private life is his own is largely fiction. Teachers, especially those new in a community, should be sensitive to the behavior codes that differentiate one community from another. They should not necessarily be enslaved to local customs, but they should have an appreciation of prevalent traditions and a consideration for them within the limits of good taste and good sense.

There is also an obligation on the part of all citizens to participate in community enterprises, and every teacher should do so. In most communities physical education teachers are expected to

engage in youth activities which relate to their field. The Boy Scouts and Girl Scouts, Y.M.C.A. and Y.W.C.A., service clubs, churches, civic and fraternal groups, and many other community organizations offer many opportunities for physical educators to broaden their community contacts.

Physical education teachers have been unflatteringly stereotyped over the years. They are envisioned as overdeveloped muscularly, attired in sweat clothes, uncouth in their use of language, lacking in the social amenities, and uninterested in scholarly and cultural attainments. By their actions physical educators must invalidate these impressions. They must be aware of these concepts and make a particular effort to eradicate them.

In summary, the role of the physical education teacher in the public relations program is accomplished through good human relations. The value of tact, courtesy, and friendliness toward all with whom he comes into contact cannot be overestimated. A dedication to the welfare of all his students is essential.

Public Relations Techniques and Media. In addition to *staff* and *program* there are many other public relations techniques and media which can be used. These include newspapers, radio, television, films, filmstrips, slides, graphic and pictorial materials, public addresses, demonstrations, school publications, and annual reports to parents. So many media are available that a problem is presented in making a selection of the ones to use.

The obvious criterion to employ in determining what media to use is that it should be the best one available for the specific purpose. The particular public or publics for whom the information is primarily intended is another important factor. Expense, time, facility of preparation, and availability are other considerations.

The newspaper. The local newspaper is a powerful factor in molding public opinion. As it reaches practically everyone in the community, it becomes an invaluable means of informing people about physical education. Because of the public's interest in its schools, newspapers are very liberal with space for school news. The only cost for this is the time required to co-operate with the press. Physical educators should take full advantage of this opportunity and assist the representatives of the local papers in every way possible. They should furnish the newspapermen with news regarding physical education in the school and undertake to learn

Harral also makes the following suggestions for effective press relations:⁷

1. Play fair with newspapers if you expect them to play fair with you.
2. Establish personal contacts with members of the newspaper staff.
3. Lose no opportunity to be of service to reporters and editors.
4. Do not send the editor thinly veiled school propaganda or advertising.
5. Since newspapers attempt to mirror life, do not expect them to publish only favorable stories.
6. Newspaper space is valuable. Don't expect too much space to be devoted to news of education.
7. Evaluate your news through the eyes of the editor.
8. Never be too busy to see a reporter.
9. Don't play favorites. Treat all reporters alike.
10. Be as eager to help the reporter to get the details of an adverse story as you would a favorable one.
11. If an editor has been generous in giving space to news of school affairs, don't strain your relationship by continually demanding more.
12. Express your appreciation to reporters and editors.
13. Invite representatives of the press to banquets, receptions, or special occasions.
14. Do not evade or side-step a reporter's questions. He may think you have something to hide.
15. Remember that a reporter seeks facts, not hearsay or rumor.
16. Don't be condescending. Reporters deal with all types of people.
17. Plan for dull days by having several tips for feature stories.
18. Don't ask the reporter for favors. He isn't the editor.
19. Don't expect the impossible. Trust the editor to know news values.
20. Keep an ideal file of potential news stories, features, and pictures.

Radio and television. Radio and television are powerful communications media because of the large number of people they reach. They have been effectively used to interpret physical education and to provide the public with essential information. Both of these media welcome programs from the schools and are usually co-operative in making their facilities available.

All commercial radio and television stations are required to devote a certain amount of time to public service programs. Many schools have a regular program scheduled on this basis. Physical education has the opportunity, along with other school activities, to

participate. In addition to these sustaining programs, information and announcements may be broadcast by means of spot announcements and newscasts. Many of the same materials prepared for newspapers can be used on newscasts if they are rewritten.

When physical educators have opportunities to present programs over the radio or television, they must seek technical assistance. Ordinarily, the individual with this responsibility for the school system will render this assistance. Radio and television personnel are also available for this purpose.

Films, filmstrips, and slides. These visual aids are being increasingly used by schools to present ideas, activities, and needs. The public has few opportunities to observe the work of the schools, and these media are usually more effective than verbal descriptions.

The production of a film is an expensive undertaking and requires careful planning and experienced direction. A number of the larger school systems have produced excellent films which have justified the expense and effort. Some physical educators have made films of their departmental activities with the assistance of volunteers who possess the technical competence required. Even though they are silent films, they are of value.

Slides and filmstrips can be developed from any good photographs. They are inexpensive to make and can be quite effective, particularly if they are in color. Ordinarily, these aids are used in conjunction with a talk on some phase of the school activities.

Other graphic and pictorial materials. Photographs, charts, graphs, and diagrams are included in this category. The Chinese proverb, "A picture is worth a thousand words," emphasizes the importance of these media.

Photographs tell a story and arouse interest. If they are well done, they interpret, dramatize, inform, and explain. They can be used for reproduction in newspapers and reports, for bulletin boards, exhibits, and window displays. For best results photographs should have a good background, show action, and involve small groups only.

Public speaking. Physical educators have frequent opportunities to speak before groups. They receive invitations to address P.T.A. groups, service and fraternal clubs, and social and civic organizations. All of these invitations should be accepted because they present opportunities for developing good public relations. It goes without saying, however, that the effect of an address depends upon how well it is presented.

The fact that an invitation to speak has been extended indicates that the group has an interest in what the physical educator has to say. Nevertheless, much careful preparation is indicated. There are, of course, a few individuals who can give an excellent address with little preparation, but they are the exception which proves the rule. In general, the quality of the speech will correspond to the amount of time devoted to its preparation.

Mastery of subject matter and interest in it are two prerequisites to effective speaking which the physical education teacher should possess. Sincerity and enthusiasm are other essentials. Speech authorities urge that speakers make an outline of the major points they wish to cover rather than write the speech out in detail and memorize it. Reading a speech is also considered poor practice. Another common mistake is to try to cover too much in one talk. Practice in delivering the speech is recommended.

Student publications. The student newspaper, the school annual, and the student handbook are important communications media which can be utilized to advantage by the physical educator. These projects are vital to the students, who are grateful for whatever assistance and co-operation they receive from the faculty. Student reporters should be treated courteously and extended all the assistance they require. The student publications can be of great help in giving the students, particularly those working on them, an understanding of physical education.

Annual reports. Many school systems publish an annual report which describes the status, progress, activities, and needs of the schools. In his yearly report to the school administrators and the school board, the physical education administrator should present a fair and honest summary of what has been accomplished in his department and indicate what its important needs are. His presentation is made stronger when he can provide objective evidence rather than personal opinion to support his recommendations. For

example, if he can present objective data which show that local children do not compare with other children or with recommended standards, he is much more likely to secure favorable action.

Demonstrations. Demonstrations are extensively used by physical educators to promote understanding and support. Correctly used, these media provide an unusually effective means of interpreting physical education to parents and the general public. It is easy to get the public to attend, and it is not difficult to create the understandings which lead to favorable public opinion. In addition to the public relations value, demonstrations are of exceptional educational value to students and teachers alike.

Demonstrations are placed before the public on special occasions, such as Parent-Teachers Night, Open-House Night, Field and Play Days, or whenever the occasion indicates the desirability of one. They should be made annual occasions rather than a device to use only when physical education is in trouble. As an integral part of the physical education program they deserve the time, space, and personnel which are required for their proper execution.

Demonstrations should represent the regular program to the public. It should involve all or as many students as can be used rather than only the outstanding performers. Preparation for the demonstration should not interfere appreciably with the regular program of instruction. The primary purpose is to *inform* the public, not to *entertain* it. Physical education has outgrown the practice of spending weeks preparing for an exhibition. Experience has shown that this approach damaged public relations rather than improved them. The demonstration should endeavor to present a representative cross section of the program and, at the same time, interpret it to the observers.

Public Relations by National, District, and State Organizations. The national, district, and state physical education organizations should initiate and carry out a definite plan of public relations. In fact, this represents one of their major functions. They supplement the work of local personnel and perform certain services on the national and regional levels which could not be done by individual teachers. The total public relations effort requires an effective program not only on the local level but on the wider state, district, and national levels.

The public relations functions of the national association is directed

by a professionally trained individual. He is assisted by other paid personnel, as well as by the national officers. On the district level the public relations efforts must be spearheaded by the officers or special committees of the district association. The state director of physical education, assisted by state association officers, conducts the program on this level.

The functions of these individuals are limited by the funds at their disposal and the needs of their organizations. Some of the things which national, district, and state organizations can do to further the public understanding and support of physical education include:

1. Disseminate and suggest public relations ideas and methods to members of the organization in the field.
2. Prepare and disseminate appropriate material for release to newspapers, radio and television programs, and speakers.
3. Establish co-operative relationships and mutual understanding with related national organizations, such as the American Medical Association, Parent-Teachers Association, American Public Health Association, National Recreation Association, American Legion, and Veterans of Foreign Wars.
4. Publicize conventions, meetings, and speeches.
5. Gather and pass on to members in the field information regarding the newest developments and best practices in physical education.
6. Study all bills that come before the Congress of the United States and state legislatures to ascertain their possible effect on physical education.
7. Take the lead in developing the strategy to be used in promoting certain bills and opposing those detrimental to physical education.
8. Promote an international relations program.
9. Provide a plan and means of getting physical education literature published in educational and other periodicals serving professional groups.
10. Prepare films, books, and brochures that will interpret physical education.
11. Conduct a research program to gather data on important needs and problems.
12. Conduct national and regional conferences on specific areas of physical education, such as facilities, teacher education, and athletics, to solve problems and upgrade the profession.

school athletics, which constitute one of the important aspects of physical education. Every contact, impression, or relationship which people have with the athletic program of an institution will mold public opinion positively or negatively. Because of the powerful interest of the public in athletics and its tendency to overemphasize winning teams, it is particularly important to cultivate as much good will as possible by effective public relations. In addition, public attendance and support of the athletic program need to be solicited.

Public Relations with the General Public. Some of the factors which are instrumental in developing favorable public relations are as follows:

1. Strong teams.
2. Well-coached teams.
3. Well-dressed teams.
4. Opponents of approximately even strength.
5. Good officiating.
6. Band and other entertainment.
7. Good accurate programs.
8. Field and equipment attractively set up.
9. Games started at time advertised.
10. Good seats for spectators.
11. Clean, ample, convenient rest rooms.
12. Convenient entrances and exits.
13. Loudspeaker system and capable announcer.
14. Good scoreboard.
15. Reserved seats.
16. Popular admission prices.
17. Good parking facilities adjacent to the field or gymnasium.
18. Courteous ushers, parking attendants, and ticket sellers.
19. Knothole club for children.

The general public does not like to see unsportsmanlike conduct exhibited by the home team or fans. There are always some rabid spectators who want to win at any price, but these do not represent the attitude of the majority of adults. They prefer their teams and coaches to conduct themselves in a gentlemanly manner and do not like to see players who are unable to lose gracefully. They are critical of poor cheering by the students, halfhearted singing after defeat, reprisals against the officials. Rallies and after-game celebrations which are characterized by vandalism and irresponsible behavior are

obviously ruinous to public relations. Experience has shown over and over that the coach with high ideals and exemplary sportsmanship, which he imparts to his players, the student body, and the fans, will invariably develop better public relations than one whose won-and-lost record may be better but whose ethics are questionable.

Public Relations with Newspapers, Radio, and Television Personnel. An extremely important consideration is the relationships of the athletic director and coach with sportswriters, publishers, and representatives of radio and television. Publicity through these various media, if translated into dollars-and-cents value, would be infinitely more than an athletic department could afford to pay. Yet, practically the only cost of this publicity is the time and effort required to co-operate with the personnel.

It pays to be honest with the sportswriters. There are times when it is desirable to suppress information. On these occasions, more will be gained by taking reporters into confidence and requesting their co-operation than by trying to deceive them or hide the facts from them. Frequently, stories will break which the coach may not wish to have published. If the confidence of sportswriters has been cultivated, they will communicate with the director or coach and, if he desires it, refrain from publishing the story. Many coaches make the mistake of trying to build up a belief in the weaknesses of their squad in order to establish a ready alibi for a possible defeat or to gain greater glory for a supposedly unexpected victory. Others go to the other extreme and boast of victories before the game is played. Some coaches are constantly seeking personal publicity. Sportswriters soon see through such tactics, and lose respect for the coach and the team, who thereby lose a powerful source of support. No athletic director or coach can afford to alienate sportswriters.

In those communities which support more than one newspaper, the coach must be careful to be impartial to the representatives of each. Much rivalry naturally exists between the various papers, and the coach may lose the support of all the papers by showing partiality to one. The same situation applies to relationships with representatives of the different radio and television stations in the community.

It is poor economy to be stingy with complimentary tickets for newspaper, radio, and television personnel. When they come to

cover a contest, special conveniences should be provided for these representatives. Good seats are essential. If a press box is available, it should be equipped so that the writers and broadcasters get the game information first. This may be done by telephone from the field or by messenger boys. The press box, naturally, should be equipped with telephones to the outside. The larger universities have a representative from each team in the press box to identify the players and supply pertinent information. Many institutions serve hot coffee and sandwiches to the representatives of the various publicity media. In short, every effort should be made to anticipate the needs of these individuals and to assist them in doing their jobs.

Public Relations with Alumni and Parents. In recent years many coaches have endeavored to develop effective public relations by weekly letters to alumni, supporters, faculty, parents, and other interested individuals. Other coaches have weekly meetings with local groups. Some coaches write letters to parents. All these methods are of value in transmitting correct information to interested groups, and if they are well done, supporters are gained. Much of the antagonism toward coaches and teams is the result of misinformation.

Public Relations with Opponents. Contrary to the opinion of some coaches and rabid fans, opposing teams represent a public with whom good relations are essential. Fundamentally, the Golden Rule should apply in all relations with teams from other institutions. They appreciate courteous, hospitable treatment, and every consideration should be shown to them as guests. Some of the recommended courtesies to be shown visiting teams includes:

1. Providing refreshments after the game.
2. Providing official hosts. These individuals—usually managers—should endeavor to provide for every need of the visitors.
3. Providing satisfactory dressing and showering facilities.
4. Accepting all decisions of officials in a gentlemanly manner.
5. Avoidance of rough tactics by home players.
6. Exemplary behavior of fans of home team.
7. Writing letters of commendation for outstanding qualities exhibited by the visiting team.

Athletic Publicity. Publicity for school athletics should stress the educational purposes and true values of these activities. Many

undesirable practices and pressures persist in athletics because the public has never been educated to anything else. The following statement is pertinent:⁶

The challenge ahead lies in interpreting and promoting the sound educational values inherent in sports. The public has to cultivate the desire to exert its influence in making sound athletic policies stick. The people in the community can be the strongest force in determining that athletics should be conducted chiefly for the good of the players. The right kind of sound interpretive publicity—and plenty of it—is the crying need. If the schools and teachers and an informed public would fight intelligently the evils in sports practices, it would not take long to remove the evils and to establish athletics as a worthwhile educational activity of value to participants, to school morale, and to community welfare.

The public has been educated to a wrong sense of values largely through the medium of the printed word. This same medium must be used to provide the proper perspective about athletics. This can be done by feature stories primarily. These cannot achieve the desired purpose if they are written in a pedantic style. The human interest stories involved in athletics can be written in simple, everyday language and can bring out incidents involving sportsmanship, sacrifice, teamwork, courage, loyalty, integrity, idealism, leadership, self-discipline, and unselfishness. Every athletic squad has many incidents which, if represented in nonacademic terms, illustrate the educational values of sport.

Athletic publicity in large universities is handled by a special department or individual having that specific duty. In smaller colleges and high schools this function is handled in a variety of ways. Sometimes, capable students may be assigned to take charge of athletic publicity. A few schools have part-time publicity men. A member of the faculty with journalistic training may assume the responsibility for the publicity program as part of his duties. Frequently, the director or coach must perform this service himself. It is very important that someone who is responsible to the director or school administrator be assigned to this work if the public is to develop the proper attitude toward school athletics.

⁶ Clifford L. Brownell, Leo Gans, and Tufie Maroon, *Public Relations in Education* (New York, McGraw-Hill, 1955), p. 154. Copyright, © 1955, by McGraw-Hill Book Company, Inc. Reprinted by permission of the publisher.

Much of the publicity in athletics is directed toward increasing the attendance at games. The following are effective media to use in this connection:

1. Daily newspapers.
2. School newspapers.
3. Radio and television.
4. Popular periodicals.
5. Moving pictures.
6. Posters.
7. Athletic periodicals.
8. Souvenir programs for events.
9. Windshield stickers.
10. Tire covers.
11. Signs and billboards.
12. Direct mail and circulars of information.
13. School annuals.
14. School and departmental catalogues.
15. School and departmental bulletins.
16. Reports.
17. Talks by athletic leaders.

The practice has grown up in recent years for all college and high school athletic departments to prepare a "dope sheet," which is made available to all local sportswriters and sportscasters in the area. This brochure contains pertinent publicity material about the team. The names of all squad members, with data concerning the age, height, weight, experience, position, and potential of each, are given. The previous season's record and the outlook for the present season are indicated. The names, experience, and achievements of the coaching staff are also included. Other information includes the schedule, type of offense and defense employed, school colors, nicknames, and the like. The value of such data from the publicity standpoint is obvious.

School athletic games and contests may be effectively advertised in a number of ways. The media listed above are well known. Some of the less known, economical, yet effective methods are herewith suggested:

1. *Ladies' day or ladies' night.* Admit all ladies free of charge to some particular game or games. This has proved very effective in increasing attendance and gate receipts at professional baseball games, and there is

no reason why it should not be successful in interscholastic and intercollegiate contests.

2. *Knothole clubs.* Admit all children under twelve years of age to all home games, excepting perhaps the homecoming game, for from ten to twenty-five cents. This creates a favorable attitude toward the school on the part of the public. Many adults come to the game because they wish to be with their children and take care of them after the game. The knothole club is segregated in a special section and kept there until the game is over. This greatly reduces the problem of watching the fences and gates to prevent the children from stealing into the games.

3. *Post card, direct mail campaign.* Organize a mailing list of prospective customers, usually alumni. Three days before the game, mail a post card with an appropriate picture on it to all of the mailing list. This card should convey anything of important informational value. The following items are suggested:

- (a) Pregame information on opponents.
- (b) Names and numbers of outstanding players.
- (c) Dates and starting time.
- (d) Seating facilities.
- (e) Record of opposing team if significant.
- (f) Any significant advertising features pertaining to the coming game; for example: the coach of the opposing team, comparative scores, scores of this game in previous years, and all-star players and high-score men.

4. *Telephone campaign.* Organize a group of volunteer students and have each call ten prospective spectators the day before the game. Divide the list of prospects, usually alumni, among the students, and have them call these people and briefly announce a few pertinent facts about the game.

5. *Parents', fathers' or mothers' day.* Allow the whole family to come for the price of one ticket. This is a valuable means of introducing the sport to the students' parents. They may find they enjoy it and return on later occasions.

6. *Game coupons.* Sell four-game coupon books at the start of the school year at reduced prices. These coupons should be transferable and good for any athletic contest during the entire school year. A campaign may be conducted to sell season passbooks to the public at the same rate that students pay. This means a considerable saving to interested individuals and will greatly stimulate attendance among the general public.

7. *Advance sale of tickets at reduced prices.* This is a sound procedure in advertising the game and increasing sales. Every ticket purchaser becomes a medium of advertising. It also insures a fair crowd and gate in the event of bad weather.

advertising games on the day before and the day of the game. It is of greater value in larger cities.

9. *Ticket-selling contests.* Ticket-selling contests between campus or school groups have been used successfully to promote sales. For a small trophy or prize, much advertising can be secured and ticket sales materially increased.

10. *Posters.* Attractively designed posters should be placed in strategic locations. Store windows, theater lobbies, restaurants, hotels, and other places which are certain to attract public attention should be utilized. An excellent plan is to post the announcements of the game on all hotel bulletin boards for the benefit of out-of-town visitors.

Radio and Television. The radio has proven to be one of the most effective media for athletic publicity. When interschool athletics were first broadcast, many directors felt that the radio would keep large numbers of spectators from attending the contests. There was even agitation in certain collegiate conferences to ban broadcasts of football games. However, experience has proven beyond the question of a doubt that the radio has greatly increased the number of followers of interschool sports. Many individuals now believe that television will reduce attendance, particularly at small college and high school contests. In fact, data are available to show that attendance has been materially reduced when contests are played at the same time that feature college games are telecast. Many smaller colleges and high schools have been forced to schedule their games on Friday afternoon or evening or Saturday evening to avoid the direct competition with major attractions.

The proposal to eliminate televising athletic contests has been seriously discussed. At the present time the National Collegiate Athletic Association is controlling the amount of telecasting of contests. Whether television will eventually increase attendance at athletic events as radio has done remains to be seen.

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Legal Liability for Injury

Importance of Knowledge Concerning Legal Liability. Physical educators have become increasingly concerned about the legal implications of injuries which occur while students are participating in the physical education program. It is well established that *more injuries occur in physical education classes, intramural athletics, and varsity sports than anywhere else within the school.* In 1941 Poe discovered that of the 168 legal court cases involving public school pupils, the *highest number by far were in physical education.* The following table indicates the number of reported legal cases in the different school areas:¹

CAUSES OF REPORTED LEGAL CASES INVOLVING PUBLIC SCHOOL PUPILS

<i>Causes</i>	<i>Number</i>
Dangerous or defective condition of school buildings.....	24
Industrial arts	16
Health and physical education.....	76
Transportation of pupils.....	35
Miscellaneous	17
<i>Total</i>	168

The fact that accidents frequently occur in physical education situations has several implications for physical educators. In the first place they are always personally liable for their own negligent behavior when it results in injury to someone else. They must always face the possibility that careless conduct might take every cent they possess. In the second place, a successful suit against the school

¹ Arthur Poe, *School Liability for Injuries to Pupils* (New York, Teachers College, Bureau of Publications, 1941), p. 5.

may eliminate or seriously emasculate the program. Accidents happening in tumbling and apparatus in particular have resulted in the widespread elimination of these activities from junior and senior high school physical education programs. School boards are not inclined to retain activities which juries have regarded as dangerous.

Finally, physical educators have a moral obligation to conduct their programs in such a way as to protect the welfare of their students. When they understand the legal implications of their work, they should become more sensitive to their responsibilities. Eventually, they should devise procedures which would prevent or at least reduce the frequency of accidents.

Negligence. There can be no legal liability for injury unless two conditions prevail. The first of these is that negligence must be shown. Negligence is considered the failure to act as a reasonably prudent person would act under the circumstances. Courts interpret a reasonably prudent person to be one who would foresee danger of an accident. Negligence is gauged by the ability to anticipate danger. If such foresight is reasonable, failure to seek to prevent danger is negligence. The second condition is that negligence will not arise unless there is a duty toward the person which is disregarded. The law imposes such a duty upon all teachers. It is clear that the physical educator as a teacher has such a duty. After all, the pupils are forced by law to attend school; physical education is compulsory in most states and schools, and when they are in school, pupils are under the authority of teachers. Under these circumstances the law imposes upon physical education teachers the obligation of acting as a reasonably prudent, careful, and well-trained teacher would act under the circumstances.

Negligence has two aspects. The first of these involves doing something which a prudent, reasonable person would not do under the circumstances because he foresees the risk of injury to others. The second aspect relates to the failure to do something which a prudent, reasonable person would foresee as necessary for the protection or assistance of another individual to whom he owes a duty.

Harper's outline of negligent behavior reveals in more specific terms the nature of negligence.* An act may be negligent because:

* Fowler V. Harper, *A Treatise on the Law of Torts* (Indianapolis, Bobbs-Merrill, 1938), pp. 171-176.

1. It is not properly done; appropriate care is not employed by the actor. Example: the instructor who permitted a student to use the trampoline without spotters.

2. The circumstances under which it is done create risks, although it is done with due care and precaution. Example: two softball games are played on opposite ends of an area which is not large enough to avoid overlapping outfielders.

3. The actor is indulging in acts which involve an unreasonable risk of direct and immediate harm to others. Example: the physical education instructor placed a boy at a certain position to mark where the shot-put landed. The instructor put the shot which hit the boy's head.

4. The actor sets in motion a force, the continuous operation of which may be unreasonably hazardous to others. Example: a person who, without justification, frightens a horse or dog which becomes uncontrollable.

5. He creates a situation which is unreasonably dangerous to others because of the likelihood of the action of third persons or inanimate forces. Example: instructor permitted a student to ride a bicycle on a playground which was crowded with other pupils. This resulted in an injury to another student.

6. He entrusts dangerous devices or instrumentalities to persons who are incompetent to use or care for such instruments properly. Example: instructor permits students to use fencing foils without supervision.

7. He neglects a duty of control over third persons who, by reason of some incapacity or abnormality, he knows to be likely to inflict intended harm upon others. Example: failure of instructor to supervise and control the conduct of a bully on a play area.

8. The actor failed to employ due care to give adequate warning. Example: instructor who was responsible for supervision absented himself from the area. Another example was involved when a student was struck by a car when crossing the street between the gymnasium and the athletic field. Negligence was found because no crosswalk was provided, no safety instruction was given to the students, and no warning signs for motorists were posted.

9. Of a failure to exercise proper care in looking out for persons whom the actor has reason to believe may be in the danger zone. Example: the physical education teacher who did not clear the students from the area directly behind the batter in a baseball game.

10. The actor fails to employ appropriate skill to perform acts undertaken. Example: inability to perform first aid when it should have been administered.

11. He fails to make adequate preparation to avoid harm to others before entering upon certain conduct where such preparation is reasonably necessary. Example: the instructor permitted students to use horizontal bar without a mat underneath.

12. He fails to inspect and repair instrumentalities or mechanical devices

used by others. Example: the failure to inspect flying rings and other hanging equipment periodically.

Defenses Against Negligence. It should be clear that there are many accidents in which negligent behavior is not involved. Pure accidents are those which happen without carelessness on the part of some other person. There are many such accidents which are completely devoid of negligent behavior.

It should be understood that to warn a pupil of dangerous places and actions is *not* an adequate defense if a suit is brought for negligence. This is not regarded as sufficient care to relieve teachers of legal responsibility for damages in the possibility of an accident. Neither does it suffice to put up written instructions regarding proper conduct to avoid accidents. Such instructions are valuable from the standpoint of reducing accidents, but when one does occur, they do not relieve the instructor from liability if he has been otherwise negligent.

However, a teacher is not always liable when an accident occurs, even though he has been negligent. There are four different legal defenses which might be employed by the teacher to avoid losing a suit. These are:

own protection, his contributory negligence would cancel any negligence on the part of the teacher.

3. *Assumption of risk.* When individuals voluntarily engage in activities they take upon themselves the risks involved in such participation. This applies particularly to intramural and interschool athletics. Both players and spectators assume the normal risks involved in participating in or witnessing athletic contests. The spectator at a baseball game who is struck by a foul ball assumes this risk when he comes to the game. The spectator who was injured at a football game when some of the players fell out of bounds voluntarily assumed this risk when he attended the game. The player who is injured in a football game understood that when he tried out for the team he was taking a risk of injury. It should be pointed out, however, that players have the right to assume safe equipment, safe facilities, and qualified leadership when they become candidates for school teams.

4. *An act of God.* Where an uncontrollable act of the elements occurs and there is an injury, no liability is attached to the teacher, even though he might have been negligent.

School Board Liability. The liability of a school district for damages growing out of negligent behavior is very different from the liability of a private individual. The reason is that the school district is performing what is considered a governmental function. In the exercise of a governmental function, a municipality is generally held to be exempt from liability suits for the negligence of its servants. This freedom from suit stems from the legal doctrine that "the king can do no wrong." This doctrine goes back many centuries in the legal traditions and practices of England. There, on the theory of the divine right of kings, "the king can do no wrong" and, therefore, cannot be sued. When we won our independence, the governmental units in this country, federal, state, and local, succeeded to the legal status formerly employed by the king of England. Thus, the state or any of its subdivisions, such as a school district, "can do no wrong" when it is performing a governmental function, no matter how careless or negligent it may be.

Two other reasons have been advanced by the courts for the immunity of school districts and their boards from suits. One of these is that the boards of education have no authority to divert funds which have been raised for school purposes to other ends, such as paying for damage suits. The other is that it is in the interest of public policy to have immunity. It is obvious that if school boards could be readily sued for damages because of negligence of school

personnel, the entire educational program could be halted or disrupted if heavy damages were awarded to a plaintiff.

Statutory Imposition of Responsibility of School Districts. The immunity of federal, state, and local governments from damage suits has received considerable criticism because injustice is done to individuals at times. To mitigate these inequities a few states have passed statutes which waive, in whole or in part, the governmental immunity from such suits. In California the state legislature has fixed responsibility for injuries upon school boards for their officers or employees, just as private individuals or companies are liable. In Washington a statute waives the immunity of schools for accidents due to negligence but retains it if the accident occurred on a playground or in a field house or involved athletic apparatus. Thus, in Washington, the effect, so far as accidents occurring in physical education and athletics are concerned, is the same as in the states where governmental immunity is observed.

Three states—New York, New Jersey, and Connecticut—have what are known as “safe harmless statutes.” These statutes permit the payment from school funds of damages arising out of injury sustained by pupils or other persons through the negligence of teachers or other employees of the school district. Thus, in these states, the teachers are protected from financial loss arising out of a judgment against them. In Iowa, the Iowa supreme court once handed down a decision that teachers are not liable for damages while carrying on a governmental function, even though they are guilty of negligent conduct.

Several states have what are known as “safe place statutes.” This legislation requires schools to provide safe facilities for the pupils. This involves both the construction and maintenance of the facilities. When accidents occur because of improper construction and maintenance, school districts in several states are liable. In most states with this type of legislation school districts are immune to damage suits.

Some injured persons have sought recovery from school districts on the claim that a nuisance was maintained. A nuisance is a condition or situation which is inherently dangerous. An attractive nuisance is a facility or piece of equipment which is appealing to a child but which, if left unguarded, might prove dangerous to him. Even though a child or a pupil might technically be considered a

from private insurance companies. Some state education associations incorporate general liability insurance as a part of the membership. Although the physical educator who is resolved never to be negligent has little to fear, many consider liability insurance an indispensable investment.

Sources of Suits in Physical Education. The most common sources of accidents in physical education which may lead to liability suits are unsafe facilities, defective equipment, transportation, failure to provide proper instruction, and improper supervision. Slippery floors (especially following dances), holes or ruts in outdoor areas, dangerous obstructions on play areas, bleachers without guard-rails, the playing of basketball games on adjacent courts which have the same or overlapping sidelines, outdoor areas which are lined with unslaked lime, the use of streets to which automobiles have access for physical education classes and activities are common examples of unsafe facilities. The items of equipment which are most often defective are springboards, flying rings, diving boards, and horizontal bars. One student was injured by a flying bat in a baseball game because the instructor permitted the batter to use a bat which did not have a knobbed end. *The failure to use mats on the floor for apparatus and tumbling activities, or on the wall at the end of the gymnasium where races are run, have led to successful liability suits.* A mat not firmly fixed on a slippery floor, a piano improperly supported, a climbing rope not periodically inspected, gymnasium lockers not securely fastened to the floor, and radiators improperly padded have all produced injuries which subsequently led to damage suits.

If an accident occurs when the physical education instructor is absent or obviously not supervising his class, he is negligent. Courts have ruled that it is negligent to use a janitor, student teacher, or student assistant to supervise physical education facilities and activities in the absence of the regular instructor. When he is supervising, he must actively control the pupils rather than stand by as a passive observer. In particular, he must prevent pupils from harming others. However, if the area is too large or the number of pupils too great, the negligence will be that of the school district rather than that of the instructor. In California a jury held a school district guilty of negligence when the plaintiff's leg was broken in a

fight on a playground where only one supervisor was assigned to supervise approximately 150 pupils.²

Failure to lock up facilities to prevent their use during the absence of the instructor has led to successful damage suits. Supervision also involves the inspection of equipment and facilities to be certain they are in safe condition. Failure of the instructor to report hazardous conditions has led to successful suits against school districts and the instructor. Unnecessary delays in repairing faulty facilities or permitting their use before repairs have been made are likewise negligent behavior.

Physical education teachers have been found negligent in not providing adequate instructions to their pupils and in permitting students to engage in activities which were beyond their ability to perform safely. "It is readily understood that no physical education teacher or coach would intentionally injure a pupil. But the physical education teacher who does not instruct a pupil as to the proper method of using a dangerous apparatus in the gymnasium has omitted a specific legal duty and, if harm ensues, is liable for tort through negligence."⁴ Thus, in New York a pupil was injured in boxing. The teacher was held liable because the student was untrained and not warned of the dangers of this sport.⁵ A pupil was injured in performing a head stand. The state was declared liable because the teacher in a normal school had failed to provide proper instructions.⁶ A physical education teacher was found liable for the injuries incurred when a student attempted to perform a running front somersault in a tumbling class. The basis of the negligence was that the activity was beyond the level of skill of the student.⁷ A physical education teacher was declared liable for a damage suit which developed when a large, poorly co-ordinated boy was injured in a shuttle relay race in which he was required to run at full speed toward a brick wall and return. In California it was ruled that physical education teachers are liable if they assign an exercise to a pupil which is beyond his level of ability.

Physical education teachers must be constantly alert to anticipate student behavior which may lead to accidents. He must understand students well enough to guard against their pranks and irresponsible actions. The alert, experienced teacher knows his pupils so well that he can sense what they will do in specific situations. This is invaluable in preventing pupils from injuring themselves from careless activities.

Public institutions have immunity from suits which arise out of negligence in transporting students unless there is a statute which waives the immunity. It is sound procedure to have institutional athletic teams travel in a school bus or a bonded public common carrier. Public carriers always have their own liability insurance against accidents. Private cars are commonly used to transport team members, but this practice is not recommended. When this is done, both the owner of the car and the school should be familiar with the public liability laws which are involved. Liability insurance should be carried by the driver and the owner of the car. If it is not available, it should be taken out by the school. The athletic director would be seriously negligent in permitting students to travel in a private car unless both the car and the driver were completely insured. It is not recommended that student drivers be used. In California a tennis coach arranged to have team members ride home in a car driven by a pupil known to be a reckless driver. The car was in poor condition with defective brakes. The school district was held liable when an accident occurred in which one boy was killed and another seriously injured.*

Procedure to Avoid Legal Liability for Injury. To avoid the possibility of legal action against the school district or himself for negligent behavior the physical educator should observe the following procedures:

- in need of repair. Make certain that students cannot use faulty equipment until it has been repaired.
6. Make a written request to have apparatus and equipment repaired as soon as the defective condition has been noted.
 7. Make certain that facilities are inaccessible to students and unauthorized individuals when no supervision is available.
 8. Do not permit students to attempt activities which are potentially hazardous until they have received proper instruction and have had adequate practice.
 9. Anticipate negligence of students which might cause injury to other students.
 10. Use floor and wall mats and other protective equipment wherever they are necessary.
 11. Adequate space should be available for all vigorous activities. Overcrowded conditions produce many accidents.
 12. If the group is too large to be adequately supervised by one person, request additional supervision in writing.
 13. If an athlete has been ill or injured, do not permit him to play again until medical approval has been obtained.
 14. Require medical examinations of candidates for interschool teams.
 15. Provide "spotting" where indicated for tumbling and apparatus activities.
 16. Administer first aid when necessary if a doctor or nurse is not available.
 17. Do not treat injuries.
 18. Do not line outdoor areas with unslaked lime. Such lines should be made with gypsum or slaked lime.

Liability in First-aid and Medical Treatment. When a student is injured, the school nurse or a physician should be called immediately. If neither is available and the pupil is obviously in need of first-aid treatment, the physical educator should administer it. For him not to do so is negligence. However, this is as far as he should go. He will be liable for negligence if he continues treatment of an injury. His responsibility extends only to the administration of emergency treatment. Teachers are also expected to exercise sound judgment in summoning medical assistance or in transporting the injured student home or to a doctor.

Value of Releases and Waivers. Many high schools follow the practice of requiring all candidates for athletic squads to procure from their parents signed statements releasing the school from any claim for injury they might incur while participating in the sport. Such releases or waivers are valueless if a suit for negligence is

instituted. They have no validity before the law because a parent has no authority to waive a claim accruing to his child for personal injury. However, such waivers and releases might be used because most parents think they have waived their legal right to bring suit.

Accident Reports. Accident reports should be required in all schools. They not only focus attention upon the causes of accidents but they also serve to give greater protection to the school. The accident report should include the name and address of the student, the activity in which the injury occurred, the date, hour, place of accident, person in charge, medical attention provided, and circumstances causing the accident. (See below for the Standard Student Accident Report Form recommended by the National Safety Council). It is very helpful to obtain signed statements from witnesses. If witnesses declare that they know nothing about the accident, it is desirable to obtain their written statements to that effect.

CHART 27

Standard Student Accident Report Form

Read Carefully	INSTRUCTIONS	Fill in Completely
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- A. Use Part A of the form to report *all* student accidents. Injuries requiring a doctor's care, or keeping a student out of school one-half day or more, should be reported regardless of where the student was when injured (on school property, enroute to or from school, at home or elsewhere).
- B. Use Part B of the form to report additional information on injuries to students while under the jurisdiction of the school. School jurisdiction accidents, however slight, should be reported promptly. Unless otherwise defined by administrative ruling or court action, school jurisdiction accidents are those occurring while students are on school property, in school building and on the way to and from school.

IMPORTANT: In order that maximum use be made of accident reports, it is essential that the accident be described in sufficient detail to show the unsafe acts and unsafe conditions existing when the accident occurred. The description should answer such questions as: What was the student doing at the time of the accident? (Playing tag or football, operating lathe, cutting lawn, etc.) Was he using any apparatus, machine, vehicle, tool or equipment? How was he using it? Would it have been safer to do it some other way? Was another person involved in the accident in any way?

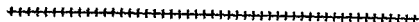
(For further information on the preparation of the original accident report and the monthly summary sheet, see *Safety Education Memo No. 3—STUDENT ACCIDENT RECORDS AND ANALYSIS*.)

Any statements of witnesses regarding contributory negligence on the part of the injured person is valuable evidence.

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- National Commission on Safety Education, *Who Is Liable for Pupil Injuries?* (Washington, D. C., The National Education Association, 1950).
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Office Management



Importance of Efficient Office Management. Every physical education administrator needs to understand the essentials of efficient office management. This need is obvious in large departments, where secretaries, clerks, telephone operators, and receptionists are available to provide a variety of services for the public and the department personnel. However, the same functions must be carried on in a one-man department, where no secretary or office equipment is available. Regardless of the size of the department, correspondence must be carried on, reports rendered, materials duplicated, equipment ordered, materials filed, and records maintained. Whether the department is large or small, the internal requirements are the same. The only difference is that in the small department the administrator must do more things himself, and in the large department the various duties are delegated to others to perform.

There are proper and improper ways of performing all the office details in a physical education office. To do them correctly saves both time and money. The efficient operation of a department requires sound office procedures. Such procedures have been tested and proved in business and industry and may be readily adapted to school situations. No administrator can afford to fail to use them.

Office Unit Orientation. The administrative offices should be centrally located so as to be accessible to all who have business with the director or any of the staff members. Almost invariably the office is located near the entrance of the gymnasium or the physical education building. Staff offices should be located adjacent to the central office and close to the classrooms.

The desirability of having a large central office serving as a work room for the secretarial and clerical staff, as a repository for all

departmental records, and as a reception room for visitors is evident. In addition, a conference room should be available for staff and committee meetings, conferences, and as a place for the entertainment of guests. However, neither of these facilities will be found in most high schools.

Office Functions and Practices. The size of the physical education office usually varies with the size of the institution and the extensiveness of the program. In some very small secondary schools the physical education administrator is fortunate to have an office. In many other small schools, if he has an office, it is one which he shares with several other staff members. Office personnel, if any is available, usually consists of a part-time secretary or volunteer student secretary or clerk. At the other extreme are the physical education administrators in large colleges and universities who have several secretaries, a telephone operator, and perhaps even a receptionist—all housed in commodious offices with the latest types of equipment.

Regardless of the size of the office staff and facilities, there are many functions which are common to practically all offices. These are:

1. Answering and placing telephone calls.
2. Receiving visitors.
3. Answering correspondence.
4. Filing.
5. Duplicating materials.
6. Keeping appointments and meeting obligations.

Each of these functions will be discussed briefly.

Answering and placing telephone calls. In larger offices telephone calls will be placed and answered by the secretary or telephone operator. The administrator without office assistance must perform this function himself. In either case standard telephone technique and courtesy should be observed. Favorable or unfavorable impressions of the department are readily created by the manner in which telephone calls are received. The proper procedures do not accidentally occur—they must be taught and insisted upon by the administrator.

The individual answering the telephone must be as friendly and as cordial as if the caller were a visitor in the office. Courtesy and

helpfulness are essential. Good public relations are created when the receiver of the call demonstrates a willingness to do whatever is required. Since emotions are readily reflected in one's voice, care must be exercised not to show anger. When it is necessary to give a negative answer the caller must have the feeling that he has been courteously treated.

The telephone should be answered promptly. The department should be identified immediately. The name of the person receiving the call is frequently given. For example, "Department of Physical Education, Miss Smith speaking." Such terms as "Hello" and "Yes" are not used in answering telephone calls in a business office.

CHART 28

Form for Recording Telephone Calls

Date _____ 19____ Name _____
While you were out, there was a personal telephone call
today.
Time _____ o'clock
From Mr. _____
Of _____
Who said _____
Telephone number is: _____
Signed _____

A pencil and telephone pad should be available to take messages or telephone numbers which are to be called. If the administrator is not available, the secretary may be able to provide the desired information herself. If the administrator is occupied, the secretary should have an understanding with him regarding interruptions. When the administrator leaves the office, he should let the secretary know where he can be located and when he expects to return. When he is out of his office, a form similar to the one given above should be used to indicate that a call has been received in his

absence. If the person called is not in, the secretary should always offer to take a message. It is helpful to get the name of the caller if he does not identify himself. In such instances the questions "May I have him call you?" or "Mr. ——— is not in. Is there a message?" are in order.

Receiving visitors. Every member of the clerical staff should be well versed in the common courtesies of greeting visitors as they call at the office. Needless to say, all visitors should be made welcome. They should be cordially greeted, and every effort should be made to meet their needs. In the event the caller has no appointment, the purpose of his visit should be determined. If it is necessary to wait to see the administrator, the caller should be comfortably seated. Something to read should be offered him. If the administrator is not available, either an appointment should be arranged or an effort made to have someone else provide the assistance the visitor desires. Visitors with appointments or important visitors should be announced immediately. A courteous procedure should be worked out whereby the secretary interrupts an unnecessarily long interview with a visitor, especially when other visitors are waiting. She can enter the office and announce, "Mr. Smith is here for his ten o'clock appointment." When there are no callers, an effective procedure is to summarize what has been discussed and to inquire if there are other matters to be considered.

Answering correspondence. One of the quickest ways for an administrator to gain a poor reputation is to be negligent or careless about answering his correspondence. Some administrators have a policy of answering every letter within twenty-four hours after it has been received. Although this may not be possible in all cases, it is a sound practice to answer correspondence promptly. Not only should the answer be prompt but it should be complete as well. All questions should be answered carefully and in good English. Needless to say, all letters should be answered.

Many letters which the administrator receives can better be answered by some other member of the department. A form is usually employed, requesting the appropriate action by the staff member. Many letters of a routine nature can be answered directly by the secretary. This will save the valuable time of the administrator. In larger institutions letters of the same type are commonly received. These may be answered by a standard form reply.

It is standard procedure to proofread all outgoing letters to detect mistakes. The address should be checked for accuracy. Carbon copies are necessary, and they should be filed with the related correspondence. When the letter contains enclosures, its weight should be determined to insure proper postage. Each letter should be examined to determine whether it has been signed. Unless the letter is neatly and correctly executed it should not be forwarded. No administrator can afford the unfavorable impression which a smudged, carelessly written letter will produce.

In many small schools the administrator will have no secretarial help whatsoever. In these situations he must handle his own correspondence. If he is unable to type, his only recourse is to write out his letters longhand. The other extreme occurs where a full-time or part-time secretary is available to take shorthand. In between these extremes are the schools in which dictaphones are available. Dictaphones have several advantages. They can be taken home and letters dictated at night or over the week end. Administrators who have part-time secretaries can dictate at any time and have the completed cylinders available for the secretary when she arrives. When the administrator is constantly interrupted during dictation, or if he has difficulty composing a letter, he can save the time of his secretary by using the dictaphone.

If the administrator has a student or an inexperienced secretary, he must remember to dictate slowly. In addition, he should have the secretary read back to him the material that he has dictated. He should also check the letters carefully before he signs it. The administrator should save the time of his secretary by having everything in readiness for dictation. If any reference data are necessary, they should be obtained prior to summoning the secretary. It is poor economy to have a secretary unoccupied because she is waiting to take dictation.

Filing. An effective filing system is essential in any office. All of the correspondence, records, budgets, and reports must be filed in such a way that they can be located quickly. It is not difficult to locate recently filed material, but on occasions several years may elapse before it is needed. Reference to filed material is constantly necessary, and when it cannot be located, delay, inefficiency and, at times, embarrassment result. Filing is more accurately done when only one person does it.

A variety of filing systems are known, but in schools the alphabetical system is almost invariably used. The material to be filed is classified according to name, subject, or a combination of name and subject. Large physical education offices will probably use both a name and a subject file, but the great majority will use the combination system.

The name file refers to names of people or organizations with whom correspondence or business is carried on. Individuals are filed under their surnames. The alphabetizing is continued through as many letters as are necessary to differentiate the names. Prefixes such as De, Di, Mac, Mc, von, and O' are part of the name they precede. In this system a folder is made for each name or correspondent if there is sufficient material to justify starting a folder. From three to ten papers justify starting a folder. A lesser amount is filed in a *miscellaneous* folder. A miscellaneous folder is made for each letter of the alphabet and is located behind the last name folder under the particular letter. Any material for which there is no separate name folder is filed in the miscellaneous folder, alphabetically rather than by date.

Subject filing refers to filing the material according to the subject matter with which it deals. The subject headings must be specific, significant, and technically correct. Nouns are generally used to refer to the subject. Subheadings are used in subject filing. A miscellaneous folder is also used in subject filing. The papers in a subject folder are arranged by date, with the latest date on top. When subject files are used, the maintenance of a separate alphabetical list or card index of the subjects is recommended. This will prevent filing material under a new heading when a folder is already available.

documents. This is useful when reference is made to a specific document that might be filed under several headings. The material should be filed under the most logical heading, and a cross-reference form should be placed in the folder under the related designation. The cross-reference form should be mimeographed on $8\frac{1}{2} \times 11\frac{1}{2}$ inch paper that is colored. It should allow for (1) the correspondent's name, and (2) data to indicate to what letter or document reference is made.

When a file is removed from the filing cabinet for any length of time an "out" slip or guide should be inserted. Regular "out" guides have pockets for the cards which indicate the location of the missing file. When individual papers are removed from the files, an "out" slip should be substituted. An "out" slip should be wider than regular paper so as to clearly show above the edges of the other papers within the folder. When folders or papers are not returned promptly to the files but are kept at various desks, it soon disrupts the filing system. Secretaries must keep their filing up to date. When they are busy, there is a tendency for a considerable amount of unfiled material to accumulate on their desks.

In setting up a filing system for a medium-sized school, the first step should be to segregate the total program into specific subjects, such as:

1. Physical education.
2. Intramural sports.
3. Health education.
4. Interscholastic sports.

Each drawer of a four-drawer filing cabinet would refer to a specific area with the subareas listed in alphabetical order.

The physical education drawer could be subdivided into the following areas:

1. *Annual reports.* A folder for each annual report should be included.
2. *Budget.* A folder for each annual budget for each of the past five years should be maintained.
3. *Committees.* A folder for each committee should be filed.
4. *Correspondence.* Folders should be arranged alphabetically under this heading. All carbons and original copies of communications should be filed in the appropriate folder.
5. *Departmental policies.* The departmental policy file should be included

in a folder. If desirable, a number of folders might be used with each including the policies in different areas.

6. *Equipment.* A folder should be included listing the equipment, excepting that included in the interscholastic athletic inventory. The new equipment on order should also be noted.
7. *Financial matters.* Duplicate copies of all requisitions and duplicate vouchers submitted for payment can be filed under this heading.
8. *Personal records.* A folder for each student should be available. This should include his medical examination records, correspondence with family physician, parents, and others. Excuses and the anecdotal record of student achievement and conduct can also be filed in this folder.
9. *Service program.* A folder for each activity taught should be available. This might include lesson plans, rules, syllabus, examinations, and teaching aids, such as clippings from newspapers and magazines. In addition, a folder for the program and schedule for each year for the past three years should be included.
10. *Student help.* Records for all part-time and student help should be kept in this folder.
11. *Test data.* Complete data on physical fitness and other tests should be filed in folders according to the school year in which they apply.

The intramural sports drawer could be subdivided as follows:

1. *Intramural activities.* A folder for each sport included in the program should be available. These should include rules governing that activity. In addition, it might include past records and schedules.
2. *Officials.* A folder with the names, addresses, telephone numbers, and qualifications of all officials used in the program should be available.
3. *Programs.* A folder should be available which would contain the details of each year's program for a period of five years. The details should cover such items as the participants and teams in each sport and the results of all the competition.
4. *Publicity.* A folder should be retained which has all the posters, announcements, news stories, and other publicity materials.
5. *Schedules.* This folder should contain schedules for all intramural activities for the current year.

The health education drawer might be arranged as follows:

2. *Health services.* A folder under this subject heading should be included for each of the following areas: health examinations and followup, screening, counseling, communicable disease control, and sanitation of the school plant.
3. *Health instruction.* A separate folder under this subject heading should be available for each of the following areas: personal health, communicable and noncommunicable disease, first aid and safety, family life education, nutrition, exercise, rest and recreation, health services and products, community health, and narcotics and alcohol education.
4. *Healthful school living.* A separate folder under this subject heading should be included for each of the following areas: school lunch, seating, heating, lighting, ventilation, swimming pool sanitation, and locker and shower room sanitation.

The interscholastic sports drawer might be subdivided as follows:

1. *Budget.* A folder should be filed for the interscholastic athletic budget for each year for the past five years.
2. *Contracts.* A folder is desirable for each sport which involves contracts.
3. *Eligibility lists.* For each sport, a folder should be available in which there is an eligibility list.
4. *Equipment.* A folder for each sport should be available in which data concerning equipment is filed. These data should include an equipment inventory plus a listing of new equipment which has been ordered.
5. *Game reports.* A folder for each sport should be included which would contain game reports for home games. The game reports should include such data as attendance, weather, gate receipts, opponent, and score.
6. *Officials.* All data relating to officials should be filed under this heading in folders arranged according to sports.
7. *Schedules.* Schedules for all sports in the current year should be included in a folder. Folders for previous years should also be maintained. In some schools a folder for future schedules is needed.
8. *Sports.* A folder for each interscholastic sport should be maintained. Included in such a folder will be squad personnel, current records, lesson plans, scouting reports, coaching aids, and the like.
9. *Transportation.* A folder should be developed for each sport. Every folder should contain all arrangements for travel by the respective team.

From time to time the files should be checked and obsolete material removed. It does not take long for the files to become cluttered with useless documents unless they are cleared at periodic intervals, say

annually or semiannually. Some of the material can be discarded completely; other papers may be transferred to an inactive file. How long various documents are retained depends somewhat upon the nature of the material and the space available in the filing cabinets.

Duplicating materials. A constant need exists in a physical education office to have materials duplicated. In addition to the requirements in instructional classes for objective examinations, reading lists, syllabi, instructional materials, and outlines, coaches may wish to have plays duplicated for their players, and the intramural director will require numerous copies of rules and schedules. The administrator will also need to have various materials duplicated, such as departmental regulations, announcements, minutes of committee meetings, and instructions to staff members and students.

In most high schools and colleges the materials are mimeographed or dittoed in a central office. However, when the volume justifies it, the physical education department has found it advantageous to possess its own duplicating equipment. Dittoing equipment, particularly, is inexpensive to purchase and to operate. Although the ditto and mimeographing machines are simple to operate, it is advisable to restrict their use to authorized individuals only. On staffs where little if any office personnel is available, staff members can learn how to operate the duplicating machine. They can then reproduce their own materials.

Keeping appointments and meeting obligations. On many occasions physical education administrators must make appointments to speak to people or to perform some task by a certain stipulated time. To meet these obligations the administrator must have some infallible system of reminding him of these events. He must use the techniques which have proven successful in all types of offices. He simply cannot afford to miss or to be late for an appointment, forget details, or submit tardy reports.

The establishment of regular office hours facilitates the making and keeping of appointments. When staff members, students, tradespeople, and others know what the regular office hours are, they can usually arrange to see the administrator at a mutually convenient time. He must keep his secretary informed concerning any changes in his office hours, especially when he knows he will be absent or late.

When the necessity of performing a task occurs, many administrators endeavor to take care of it immediately. If the administrator is free for an immediate appointment, or can make a telephone call, write a letter or prepare a report at once, rather than defer it, there is no possibility of forgetting it. If the matter cannot be immediately disposed of, a notation should be made concerning it. Calendars are essential in any office to assure that appointments are kept and obligations met. The administrator needs a desk calendar with 15- or 30-minute time designations. All appointments and obligations should be noted on the calendar. Every office has a number of recurring items every year, and these should be noted on the calendar at the beginning of the school year.

The administrator also needs a pocket appointment book. This should include all the notations which are on his desk calendar. He will make appointments when he is away from his own office. He will also need to know of his office appointments when he is elsewhere. It is essential that the appointments on his desk calendar and pocket calendar coincide.

If a secretary is available, she should also maintain a desk calendar. It is her responsibility to see that her calendar and those of the administrator are accurate, identical, and up to date. She must be careful to learn of the appointments that the administrator makes when he is away from his office. She must see that the administrator meets all his appointments and obligations. To remind her employer of a task he should do, the secretary should place the file on his desk. If it is obvious that he has overlooked a call or appointment, she should remind him of it. It is a sound practice to spend the first few minutes each morning with the secretary, discussing the daily schedule. Some secretaries place a typed schedule of the administrator's appointments on his desk every morning. Whenever the administrator leaves the office, his secretary should be aware of where he might be reached and when he expects to return. When he leaves his office at the end of the day, he should check his calendar to see whether he has any early appointments the following day.

It is a mistake for the administrator to rely upon his memory for the conduct of his daily affairs. It has been said that "the shortest pencil is better than the longest memory." Everything that cannot be taken care of immediately should be written down in such a way that it will not be forgotten.

A very helpful office device which may be combined with a desk calendar is known as the office tickler. The tickler carries reminders for certain routine activities. There are in every department many duties which recur each year. These can be indicated on the office tickler in advance. The tickler file usually consists of a box built to hold 3×5 memorandum cards. A tabbed guide for each month and 31 tabbed guides for each day of each month are needed. Each activity which is to be performed at a future date is noted on the appropriate card. The cards are filed according to dates. The tickler file needs to be checked every morning. Certain items which occur frequently throughout the year can be handled by a single card. Thus, if the payroll must be completed on the last day of each month, the same card may be used each month, rather than making twelve separate entries.

Another task which can be handled by the secretary is making travel arrangements. The secretary needs to know the approximate time of departure and return, the mode of travel, accommodations desired, appointments, and hotel preference. With this information, she is able to make all arrangements and save considerable time for the administrator.

In larger offices secretaries make the necessary arrangements for committee meetings. To work out a convenient time and place for a number of people to meet is frequently a time-consuming process.

Office Management in a Small High School. The heavy load of the administrator in a small school makes good organization and efficient methods of office management particularly necessary. He should have one period set aside every day for the conduct of his departmental affairs. If such time is not provided, he will need to use his free period or time before or after school.

or ditto machines, to maintain records, and to perform the essential housekeeping duties of the office. They can render invaluable service if they are used wisely. They must be given recognition for their services, and care must be exercised not to exploit them.

In the small high school office equipment is usually limited. The minimum items in any office should consist of:

1. One desk for each teacher.
2. Desk tools (ink stand, paperweight, paper cutter, scissors, ruler, paste, blotter, pens, pencils, paper, stapler, and clips).
3. Calendar and memorandum pad.
4. A large work table for student assistants.
5. Extra chairs for guests.
6. A four- or five-drawer filing cabinet with lock.
7. Several card files of different sizes.
8. Bookshelves.
9. Magazine stand.

A typewriter and a typewriter table are very important items which are often not available in small high schools. If this equipment is not available, access to some other typewriter within the school should be obtained. If a telephone cannot be procured, the office telephone may be used.

Office Management in a Medium-sized High School. In a medium-sized high school the physical education administrator has the same duties as the administrator in the small school. However, he is much more likely to be allocated time for his administrative duties. He may be relieved of two or three teaching periods per day for this purpose. More office equipment will probably be available. He will undoubtedly have more people to whom he can delegate various duties. It might be possible to use the principals' clerical staff for dictation, typing, and mimeographing. Student assistants will continue to be needed. For part-time and student secretarial help, a specific job description will be helpful. If they can have recourse to written instructions and policies concerning their various responsibilities, they will avoid many mistakes. A typewriter and typewriter table and a telephone and an alphabetical index to common telephone numbers should be available in the administrator's office.

Office Management in a Large Institution. In a large school where one or more clerical personnel are available the role of the administrator is that of office manager. All the activities carried on in

the office are his responsibility. The duties of the different individuals are assigned and supervised by him.

A standard procedure in large offices is to develop a job description for each member of the clerical staff. This enables the employee to know specifically what is expected of him and that he or she is held responsible for demonstrating competence as it applies to these responsibilities. This does not mean that each employee is restricted from assuming other duties in the office as circumstances require.

In a large office a definite organizational structure might be necessary for the office personnel. Responsibility must be vested in some individual—usually the most experienced, mature, and highest-ranking member. The administrator will not have the time to concern himself with the details of managing the office. The assignment of duties, distribution of work, and supervision of the work of all office personnel should be delegated to this person.

The administrator is responsible for the development and maintenance of high morale and esprit de corps among the office personnel. He accomplishes this by creating pleasant work conditions, by establishing reasonable standards of accomplishment, by providing suitable working tools, and by friendly, helpful supervision.

In large schools the matter of communication within the office and among the staff is a problem. The accepted practice is to use written interstaff memoranda. Special forms are available for this purpose. These memoranda are time saving and have the advantage of fixing responsibility. In addition, they reduce the risk of misunderstanding and error.

The Secretary.¹ An important asset which many administrators overlook in planning their work is a capable secretary. By working with an intelligent secretary and learning to delegate to her all the responsibility which she is capable of assuming and by leaving in her hands many time-consuming routine matters, the administrator will find that he has much more time for creative work and will thereby be of much greater value to his profession. The wise administrator, then, should know what a good secretary is, what she can do, and how to make the best use of her abilities.

¹ The authors are indebted to Miss Eleanor Metheny of the Division of Physical Education, University of Southern California, for the material in this section.

It may seem a bit obvious to state that intelligence, personality, and character are the three general personal qualifications of a good secretary, but the lack of any one of these dooms many an otherwise promising girl to the rank of the automaton who "takes dictation."

Her intelligence should be practical and analytical, not merely abstract, and she should be able to comprehend the factors in any situation and make some reasonable decision about it, with sound logic to back up her judgment. Her intelligence must include a capacity for detail and an ability to deal with the almost endless routine matters which arise in any administrator's office. And if this intelligence is to function to the best advantage for the secretary and the administrator, back of it must be a real interest and pride in the activities, welfare, and progress of the department. If she is desultory and detached regarding her duties and performs them mechanically, she will be no particular asset. When an administrator has a secretary who is dedicated to her position and takes a deep personal interest in the success of the department, he is indeed fortunate.

The personality of the secretary is of critical importance. She constantly encounters students, staff members, other faculty, and visitors, and it is vital that she create a favorable impression. Since the administrator will spend from one third to three fourths of his working hours in her company, it is axiomatic that her personality be an important consideration to him. The pleasant, cheerful, and sensible girl is not only easier to work with than the temperamental one but will usually accomplish much more in the same amount of time.

The caller's first impression of the administrator comes from the front office, where he is received by the secretary. She is the office hostess and, as such, should have all the prerequisites of any hostess—graciousness, cordiality, interest, and tact. By her own well-bred manner and well-groomed appearance, she should convey the impression of the well-run office where all demands are given courteous attention. She should meet people easily and pleasantly and attend to their wants as effectively as possible, making no obvious display of efficiency, but quietly accomplishing what needs to be done. She will need endless poise, good humor, and diplomacy in dealing with the many who come to the office, and she must also exercise discrimination in determining which of them have legitimate business with

her employer and which of them do not. In a word she must be efficient, but charmingly so.

Her telephone voice and manner should be as pleasant as her office personality. She should be able to convey to the person who calls that he is talking to a capable and willing person who, in most cases, can supply him with the information he needs without troubling the administrator about it. To assume the somewhat belligerent "who wants to talk to him?" attitude is as rude as it is inexcusable.

The secretary who really becomes a part of the organization must be extremely adaptable and ready and willing to do whatever must be done, no matter how far it may seem to fall out of her sphere of activity. She must remember that her position exists because she can be of service to the administrator, and that service is never limited to the mere mechanics of letter writing.

If she is to rise above the ranks of the typists, she will find herself sorely needing a sense of humor to enable her to keep proper perspective on herself, her job, and those around her. She must be able to talk easily and entertainingly on occasion, but above all, she must learn to be a good listener and to take an active interest in the discussions of the plans of the present and future which her employer will want to talk about to someone who understands what it is all about but who can be trusted to keep his confidence.

To be worthy of the name, the secretary must be absolutely reliable in all situations so that her employer may trust her as completely as he does himself. Her loyalty to him must be absolutely unquestionable. In the course of her day's work a secretary learns many things which are not for publication, but no matter how prone she may be to gossip about her friends and neighbors, she will never under any circumstances gossip about office information, however trivial it may be. The necessity for personal integrity is too obvious to need statement.

She should know the essentials of order and have a systematic way of getting her work done, not only in the quickest way but in the best possible way. She should sense the relative importance of each task and learn to do first things first.

It is desirable but not essential that she have some training in the field in which her employer is interested. If this is not feasible, she should acquire at an early date a very real interest in that field and keep herself reasonably well informed about it. This will not only add to her enjoyment of her work but will increase her value to her employer.

Having hired a secretary, many an administrator seems to feel that his responsibility is ended, and from then on it is up to her. If he takes that attitude, he will soon find that he does not have a capable secretary but just one more girl working in the office. It is important that as soon as she begins working, he should see to it that she has all possible information concerning the work that is to be done. In any organization there is almost endless red tape with which the secretary becomes entangled in the course of her day's work, the workings of much of which she will eventually learn by trial and error. But a knowledge of the regulations will save her endless time and trouble. Do not expect her immediately to assume charge of all the routine matters which will arise. Give her time to learn. But gradually, as she proves herself capable, delegate to her all the responsibility she is able to handle. This is the point at which most administrators fail. They cannot bear to see authority to act on matters, however trivial, placed in hands other than their own. Remember that she is an intelligent adult and treat her as such; and having given her responsibility, trust her with it and let her feel that you do trust it. Her judgment may soon be almost as good as your own in those situations which are covered by previously determined policies.

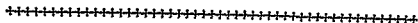
Much has been written of loyalty of the secretary to her employer, but much more might be written about the loyalty of the employer to the secretary. She is, presumably, intelligent and capable of handling her job, and she should be backed up by her employer in any reasonable situation, not made the scapegoat for all the mistakes which occur in the office. To humiliate her in order to inflate one's ego before important callers is, of course, an inexcusable but not uncommon practice. A feeling of mutual loyalty and respect helps

to create an office morale which makes the secretary feel that she is an integral part of the organization and that she is working not *for* but *with* a wise and understanding man, not for a salary but for the good of the profession. It is this feeling which turns a stenographer into a secretary and makes her a real asset to her employer.

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Physical Education Organizations



History in Brief. In the eleventh century a great movement toward associations began to sweep over the cities of Europe. These associations were formed around numerous aspects of social life. By the end of the fifteenth century this spirit of organization had become prominent among many classes of city dwellers. The legal, medical, and teaching professions were among those banded together at that time. Since that time many of the professions have become better organized and new ones have been established in Europe and on other continents, particularly in America.

The American Association for Health, Physical Education, and Recreation (A Department of the N.E.A.). The American Association for Health and Physical Education was founded officially in November, 1885. At that time Doctor William G. Anderson of Adelphi Academy, Brooklyn, later physical director at Yale University, was instrumental in calling together a group of about sixty teachers for the purpose of organizing a society of physical education. The gathering resulted in the formation of the American Association for the Advancement of Physical Education, with Dr. Edward Hitchcock of Amherst College, as the first president. The objectives of the association were stated as follows: "To disseminate knowledge concerning physical education, to improve methods, and by meetings of the members to bring those interested in the subject in closer relation to each other."

The new association was particularly fortunate in obtaining prominent leaders in the early history of physical education for its presidents. Among them were Dr. Hitchcock of Amherst, Dr. Sargent of Harvard, Dr. Gulick of the Y.M.C.A., Dr. Arnold, and Dr. Savage.

There have been several constitutions in the history of the society, and amendments to them have not been uncommon. Each new one was created in response to new problems presented by the rapid growth of the organization and the necessity of providing adequate representation for all sections of the country and all the specialized interests within the profession. In the third constitution, adopted in 1903, the name of the organization was changed to the American Physical Education Association. This remained the official name until June, 1937, when it became The American Association for Health and Physical Education—A Department of the N.E.A. In 1938, "Recreation" was added to this title. This department of the N.E.A. now includes five divisions: Health Education Division, Physical Education Division, Recreation Division, General Division, and Men's Athletics Division. In addition, the board of directors of the AAHPER has approved in principle a tentative divisional structure for girls' and women's sports. The present National Section for Girls' and Women's Sports may serve as a tentative division through the 1958 AAHPER convention, after which it may be evaluated by the board of directors and thus become the sixth division. There are now four divisional vice-presidents; one each for Health Education, Physical Education, Recreation, and Men's Athletics.

General Organization. The general structure of this organization may be summarized as follows:

Board of directors. The board of directors consists of the president, the president-elect, the immediate past-president, the vice-presidents, one representative from each of the six districts, and the executive secretary-treasurer (nonvoting member). The roster of the board is published in each issue of *The Journal of Health-Physical Education-Recreation*.

Representative assembly. The representative assembly consists of the board of directors, the district presidents, and twelve representatives from each division as designated by division codes. The representative assembly also includes additional state representatives, based on number of regular, professional, and life members in the AAHPER as follows: one representative for 25 to 100 members; two representatives for 101 to 300 members; three representatives for 301 to 500 members; and one additional representative for each 250 additional members above 500. State associations with less than 25 members may petition the executive secretary for representation

in the representative assembly. The executive secretary-treasurer is also a nonvoting member. The representative assembly among other duties effects all changes in the constitution and bylaws, initiates such business as it deems desirable, and exercises veto power over all action taken by the board of directors upon a three-fourths vote of all present at official meetings or by a three-fourths majority of the total membership by mail vote.

Committees. There are four kinds of committees—standing, president's, continuing, and joint committees. All but the standing committees are indefinite in number and are appointed for relatively specific duties. Among the standing committees are committees on facilities, finance, international relations, honor awards, necrology, resolution, membership, and vocational guidance.

National Office.

Location—1201 Sixteenth Street Northwest, Washington 6, D.C.

Executive Secretary-Treasurer—Dr. Carl A. Troester, Jr.

Editor-in-Chief—Dr. Carl A. Troester, Jr.

Managing Editor—Mrs. Ella H. Wright.

Associate Executive Secretary—George F. Anderson.

Organization by Interests. There are five divisions, each comprising several sections, responsible for convention program planning within their respective fields and for various specialized committee and publication projects. Each division elects a chairman, as does each section within each division. The divisions and sections are:

1. *Health Education Division*
 - (a) Elementary School Health Education
 - (b) Secondary School Health Education
 - (c) College Health Education
 - (d) Community Health Education
 - (e) Safety Education Section
 - (f) School and College Health Services
 - (g) Dental Health Education
 - (h) School Lunch
2. *Physical Education Division*
 - (a) College Physical Education
 - (b) Elementary School Physical Education
 - (c) Secondary School Physical Education
3. *Recreation Division*
 - (a) Industrial Recreation
 - (b) Public Recreation
 - (c) Recreation in Religious Organizations

- (d) Recreational Therapy
- (e) Voluntary and Youth Sewing Agencies
- 4. *Men's Athletics Division*
 - (a) Athletic Administration
 - (b) Athletic Training Section
 - (c) Fall Sports Section
 - (d) Intramural Athletics
 - (e) Sports Officiating
 - (f) Spring Sports
 - (g) Winter Sports
- 5. *General Division*
 - (a) Administration and Supervision
 - (b) Aquatics
 - (c) Athletics—Girls and Women (NSGWS)
 - (d) Camping and Outdoor Education
 - (e) Council on Equipment and Supplies
 - (f) Dance
 - (g) International Relations
 - (h) Measurement and Evaluation
 - (i) Professional Education
 - (j) Professional and Public Relations
 - (k) Research
 - (l) Research Council
 - (m) Student
 - (n) Therapeutic

Affiliated Organizations. The following associations are affiliated with the AAHPER:

1. American Academy of Physical Education
2. American School Health Association
3. American Youth Hostels, Inc.
4. Association for Physical and Mental Rehabilitation
5. Boys' Clubs of America, Inc.
6. Canadian AHPER
7. College Physical Education Association
8. Delta Psi Kappa
9. National Association for Intercollegiate Athletics
10. National Association for Physical Education of College Women
11. National Board of Y.W.C.A. of the United States
12. National Collegiate Athletic Association
13. National Committee for Health and Physical Education of the National Association of Jewish Center Workers
14. Phi Delta Pi
15. Phi Epsilon Kappa
16. Physical Education Society of the Y.M.C.A.'s of North America

17. Society of State Directors of Health, Physical Education, and Recreation

Geographical Organization. Forty-eight state associations and the District of Columbia are grouped into six districts, which hold annual conventions and elect district presidents who serve as members of the representative assembly. The districts and the sovereign units included in each are:

1. *Central District*—Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wyoming.
2. *Eastern District*—Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.
3. *Midwest District*—Illinois, Indiana, Michigan, Ohio, West Virginia, Wisconsin.
4. *Northwest District*—Idaho, Montana, Oregon, Washington.
5. *Southern District*—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia.
6. *Southwest District*—Arizona, California, Nevada, New Mexico, Utah.

Publications. *The American Physical Education Review*, for over thirty years the official organ of the association, was founded in 1896. Previous to that time ten reports had been issued each year. The *Review*, unlike the reports, aimed to do more than publish the papers of the convention. In 1922 the *Review* published ten issues a year (July and August excepted) and gradually expanded in size. Its contributors included many figures well known in educational and scientific research. In 1930 the name of the official publication was changed to the *Journal of Health and Physical Education*. The present title is *Journal of Health-Physical Education-Recreation*. It is published monthly September to April inclusive, and bimonthly in May and June. The content of the *Journal* deals predominantly with practical, popular material written so that the layman can understand it. Regular membership costs \$5.00 (\$2.50 for students) and carries with it subscription to the *Journal*.

The association also publishes a *Research Quarterly*, containing four regular issues per year, in March, May, October, and December. Besides the regular issues, occasional supplements are published. The *Research Quarterly* is sent to professional, sustaining, and honorary members, and patrons without charge. As the name implies, the

Quarterly deals with research, scientific, and summary material of a more technical nature and serves as a stimulus for more scholarly work in the profession.

In addition to the two regular magazines the association now publishes considerable other material in book, magazine, and report forms.

Additional Organizations. A brief presentation of information concerning a number of other physical education and semiphysical education organizations is included to illustrate the types and variety of forms these organizations take in the United States.

National Section for Girls' and Women's Sports. The National Section for Girls' and Women's Sports, frequently referred to as the NSGWS, is one of the largest, most active and influential sections of the American Association for Health, Physical Education, and Recreation. It is the only organization in the country which is concerned with the total sports program for girls and women from junior high school age and up. The membership includes all women members of the AAHPER who are interested in sports for girls and women. These women are trained leaders and teachers in high schools, colleges, and universities, business, recreation, industrial plants, military services, and private and public clubs and agencies.

The purpose of the section is to promote wholesome sports programs for all girls and women. At all times the welfare of the player is of prime concern. The purpose is achieved by:¹

Formulating and publishing guiding principles and standards for the administrator, leader, official, and player.

Publishing and interpreting rules governing sports for girls and women.

Disseminating accurate information on the conduct of girls' and women's sports.

Stimulating and evaluating research in the field of girls' and women's sports.

NSGWS is a continuous working section, with an intricate constitutionalized national organization and many specific annual commitments. Its business is transacted by a legislative board made up of officers, district representatives (two from each of the six districts of the AAHPER), standing committee chairman, and advisory members. Some of the commitments which members of the board

¹ *Operating Code*, National Section Girls' and Women's Sports (April, 1954).

assume annually are the editing and publishing of the sports guides and similar publications, promotion of women officials for sports played by girls and women, planning of programs for demonstrations, clinics and meetings at local, state, and district levels, and the promotion at the national level of all its services (standards, publications, official rating, advisory and consultant).

There are eleven standing committees: audiovisual, finance, international relations, nominations and elections, operating code, public relations, publications, research, rules and editorial, standards, and women's official rating. The rules and editorial committee is made up of the chairmen of the eighteen sports committees which publish at regular intervals guides for aquatics, winter sports, and outing activities; archery-riding; basketball; bowling-fencing-golf; field hockey-lacrosse; recreational games-volleyball; softball-track and field; soccer-speedball; and tennis-badminton. These publications include articles pertinent to the various sports and the official rules for girls' and women's sports.

Since the merger of the NSGWS with the Women's Division of the National Amateur Athletic Federation, the NSGWS has become the authoritative body in establishing standards for girls' and women's sports. Statements on standards prepared by its Standards Committee were first published in 1937. To insure their continued usefulness and to make them applicable with present needs, trends, and practices, the statements on standards have been constantly reviewed and revised. They have been accepted widely by professional schools of physical education, physical educators throughout the country, recreation groups, and the military services. In 1941 an adaptation of the standards was published under the title *Desirable Practices in Sports for Girls and Women*. In 1948, specific standards were published for each of the team, dual, and individual sports.

The unique feature of this organization is the number of women who give generously of their time and effort because of their interest in sports for girls and women and because of their firm belief in the principles and standards of the NSGWS. Through this voluntary participation the members of the NSGWS render a vital service to youth as well as to the profession and, at the same time, have opportunities for their own professional growth.

The organization chart of the NSGWS follows:

The American Academy of Physical Education. Luther H. Gulick was largely responsible for organizing the American Academy of Physical Education in 1904-05. This body continued until World War I. The academy was revived in 1926. It was officially founded and a constitution was adopted in 1930 with twenty-nine charter members. The general purposes of the American Academy of Physical Education are to advance knowledge and common understanding, to raise standards, and to bestow honors in physical education and in related areas. More specific purposes are (a) to elect as fellows persons who have made significant professional contributions; (b) to stimulate needed research through guidance and advice; (c) to disseminate professional information both within this country and in foreign lands; (d) to assist with the enactment of appropriate legal measures in local, state, and federal governments; (e) to encourage competent persons to enter the profession; and (f) to recognize meritorious and scholarly achievements by indicative awards and citations.

Membership consists of (a) active fellows (not to exceed 100 at any time), (b) associate fellows, (c) corresponding fellows, (d) fellows in memoriam, (e) honorary fellows in memoriam, and (f) fellows retired. Voting privileges and holding office are restricted to active fellows, who alone pay the initiation fee of \$10.00 and annual dues of \$10.00. Selection of all fellows is made by the membership committee with election by active fellows of the academy. A two-thirds majority of all votes cast is required for election to membership. Publications include papers and reports presented at annual meetings. As is true of most significant organizations in the field, committees are used to assist in expediting the work of the academy. These are of two types; standing committees, of which there are four (membership, awards and citations, publications, and international relations); and presidents' committees, of which are currently three (nominating, constitution, and program).

The College Physical Education Association. In 1897 nine prominent physical educators met in New York and established the ground work for the organization of the Society of College Gymnasium Directors. Dr. J. W. Seaver was elected president, and Dr. W. L. Savage was elected secretary-treasurer. In 1909 the name of the organization was changed to the Society of College Directors of Physical Education, which, in 1933, was changed to the present

one, the College Physical Education Association. In contrast to the former tendency to restrict membership both as to type and position, the present tendency seems to favor expansion and extension of the benefits of the organization to all who are interested. Many of the leading administrators of physical education in colleges are or have been members of this society.

Several major projects have been undertaken by the society, the first of which was to perfect strength tests for college men. Other projects include standardization of terms in physical education; improvement of physical education buildings and plants; conduction of curriculum research; improvement of the administration of intercollegiate athletics and of the sanitation of swimming pools; presenting proposed relationship of college physical education to national preparedness; dealing with various subjects of a timely nature, such as proposal of policies concerning accepting military training for physical education and hygiene credit; accepting joint sponsorship with the AAHPER and the National Association for Physical Education of College Women of two national conferences (required physical education 1953 and intramural athletics 1954); and sponsoring of graduate studies which appear important to the profession.

There are three types of membership: active for active college teachers or administrators in the field, associate for active members in related fields, and honorary.

The National Association of Intercollegiate Athletics. The NAIA believes in the socializing values of intersectional and national competition. Originally named the National Association of Intercollegiate Basketball at its inception in 1940, this association changed its name in 1952 to the National Association of Intercollegiate Athletics. It now has well over 400 member schools, which are divided into 32 districts, each of which is entitled to qualify a team to represent its district member institutions at national tournaments and meets. At the present time national championship plans are set up for cross-country, football, basketball, track and field, golf, and tennis.

The tentative aims and objectives which are now in the process of being voted upon for approval by the member schools, and may well be established by the time this book goes to press, consider among other goals: that the individual be developed to the fullest extent; that the entire program be evaluated in terms of educational

purposes; that inclusion of prescribed courses, intramural, and extramural activities, and intercollegiate athletics all be included in the broadly based program of physical education; that intercollegiate athletics has the same general aims as the rest of the program but offers additional educational experiences; that the intercollegiate athletic program in all of its phases stress moral and ethical values; that the intercollegiate athletic program should be controlled completely by the college administration; that the broadly based physical education department should have a place in the structure and function of the educational institution as do other departments; that members should compete with others having the same standards and practices; that students competing in intercollegiate athletics be bona fide students whose financial aid, except that from home, be administered by the college; and that the association and member schools work co-operatively to improve programs of intercollegiate athletics.

The American College of Sports Medicine. The sports medicine movement in Europe dates from the late 1920's. There are bibliographies in German and Italian that publish material that goes back as far as 1925. In South America the Sports Medicine Association of Argentina held a celebration of its twentieth birthday in April, 1955.

In the United States there has been much activity in one area of sports medicine for many years, the area of the prevention and treatment of sports injuries; but the broader field was not entered in this country until the American College of Sports Medicine was organized at the New York meeting of the American Association of Health, Physical Education, and Recreation on September 27, 1954.

In the sports medicine organizations of Europe and South America, *sports* is defined very broadly, and the term is applied not only to competitive athletics but to almost the whole field of physical education activities, including exercise therapy in hospitals, convalescent centers, rehabilitation centers, and all exercise-type activities designed to serve the human race.

The term *medicine* is likewise very broadly conceived and embraces not only physicians but exponents of numerous biological sciences that are interested in improving the welfare of mankind. Among the medical fraternity who have become interested in sports medicine and who have contributed to its literature may be listed (1) internists, (2) cardiologists, (3) physiatrists (practitioners of physical medicine),

(4) psychiatrists, (5) orthopedists, (6) practitioners of general surgery, (7) gynecologists, and (8) those who are frequently classed as "team physicians."

Among the scientists who may or may not be graduates of schools of medicine may be listed (1) pathologists, (2) physiologists (especially those working in the subarea of physiology of exercise), (3) chemists, especially biochemists, (4) specialists in nutrition, (5) geneticists or eugenists interested in problems of the heredity of qualities making for success in sports, (6) anatomists and muscle-kinesiologists, (7) anthropologists and anthropometrists, (8) psychologists, and (9) hygienists.

In addition, there are the large groups of (1) physical educators, (2) athletic coaches, (3) exercise therapists (known also as corrective therapists, specialists in physical reconditioning, specialists in physical rehabilitation, specialists in adaptive physical education, and so forth), (4) mechanics-kinesiologists, (5) athletics trainers, (6) health educators, (7) recreation specialists, and (8) general educators and education administrators.

There are many interdiscipline problems, of which hundreds could be cited. For example, there are (1) problems of sports medicine that interest the coaches and the nutritionists; (2) those that interest coaches, the trainers, and physiatrists; (3) those with which the physiologists and pathologists are concerned; (4) the growth problems that interest both the educators and the anthropologists; (5) the problems of technique that interest the coaches, the physical education teachers, and the kinesiologists of muscle action and of mechanical analysis of motor skills; and (6) problems of girls and women's sports that interest the gynecologists, the psychologists and physiologists, and the educational administrators, as well as the physical educators.

The above-mentioned fields of medicine, of physical education, and of science function through research laboratories of many types, through schools and colleges, sports clubs, recreation facilities, private organizations, hospitals, convalescent and rehabilitation centers, and many other groups. The areas involved include labor and industry, agriculture, all branches of the armed services, social centres, athletic administrative organizations in this country, such as the NCAA, the AAU, the Olympic committees, and numerous other public, private, and semiprivate organizations.

Among the areas served are those of the physiology of exercise, applied anatomy and kinesiology, applied anthropology, some fields of hygiene, the pathologies related to sports, clinical sports medicine, physical medicine generally, surgery and orthopedics applied to sports injuries, exercise therapy, the psychology of sports, special problems in sports of girls and women, the techniques of training, the pedagogy of sports, the functions of the trainer, and research in these various areas as applied to sports and physical education generally.

The American College of Sports Medicine meets annually and, whenever possible, with the American Association for Health, Physical Education, and Recreation at its national meeting. The organization has a president; three vice-presidents—one for medicine, one for physiology, and one for physical education; a secretary; and a treasurer. There are ten members of its administrative council, and a total of twenty members of the board of trustees, including the officers and members of the administrative council. As of the date of publication of this text, there are ten functioning committees.

In the European associations—international and national—practically all of the active members are physicians. In South America and the United States there are many physical educators, physiologists, and other scientists enrolled as regular members or "fellows," as they are termed in the American College of Sports Medicine.

This field, which in the United States is a new one, bids fair to develop rapidly and to make an increasing contribution to co-operative research in the field of sports, through the working together of physicians, physiologists, anatomists, pathologists, nutritionists, physical educators, and others interested in the area of sports and physical education.

National Association for Physical Education of College Women. The purpose of this association is to study problems relating to the physical education of college women to the end of increasing its effectiveness. There are five district associations: the Eastern Association for Physical Education of College Women, Southern Association for Physical Education of College Women, Midwest Association for Physical Education of College Women, Central Association for Physical Education of College Women, and Western Society for Physical Education of College Women. The Eastern Association was the parent organization, and Miss Amy Homans was chiefly

responsible for its organization. The first preliminary meeting was held, upon her invitation, at Wellesley College in 1910. Similar meetings were held for the next few years, but the Association of Directors of Physical Education for Women (the early name for this group) was not organized until 1915. In 1916 the constitution was adopted.

At the present time the association maintains a rather extensive committee structure which promotes studies in various areas. There are standing committees on constitution, research and studies, public relations, international relations, honorary memberships, legislation, and an editorial committee. There are, in addition, special committees on historical records, professional leadership, intramural and extramural sports and dance, and the instructional program for college women. Meetings of the association are held biennially. These meetings alternate between short meetings and longer workshop meetings of a week in length.

The Society of State Directors of Health, Physical Education, and Recreation. This society, affiliated with the American Association for Health, Physical Education, and Recreation was organized in 1926, with Carl L. Shrader as its first president. The practice of employing state chiefs, consultants, co-ordinators, and directors is comparatively recent. There were but four in 1918, nineteen in 1936, and thirty-six in 1947. Additional physical education legislation and the development of more state physical education syllabi point toward the installation of more state directors of physical education. There are active and associate members; the former consists of directors and the latter their professional assistants.

Official titles of those in charge of the state departments of health, physical education, and recreation vary. In some cases the director is in charge of health and not of physical education. The following is the list of directors, supervisors, chiefs, co-ordinators, consultants, and acting directors in 1956:

- Alabama, Mrs. Jessie G. Mehling, Supervisor, Health and Physical Education.
Arizona, John D. Riggs, State Director.
Arkansas, Jeff Farris, Director, Health and Physical Education.
California, Carson Conrad, Chief, Bureau of Health, Physical Education, and Recreation.
Colorado, Mrs. Marguerite Juchem, Supervisor of Secondary Education.
Connecticut, Dr. Ruth V. Byler, Consultant, Health and Physical Education.

- Delaware, George W. Ayars, Director, Health and Physical Education.
- District of Columbia, Birch Bayh, Director, Health, Physical Education, and Safety.
- Florida, Zollie Maynard, Director of Health, Physical Education, and Recreation.
- Georgia, James Owen, Co-ordinator of Health Education.
- Illinois, George P. Mathis, Assistant to the Superintendent, Health, Physical Education, and Safety.
- Indiana, Robert Yoho, Director of Health and Physical Education.
- Iowa, Dr. Leonard C. Murray, Director, Division of Public Health Education.
- Kansas, May Hare, Health Education Co-ordinator.
- Kentucky, Eugene B. Whalin, Administrative Assistant of Health and Physical Education.
- Louisiana, Howard W. Kidd, Supervisor of Health and Physical Education.
- Maine, Quentin R. Unger, Director, Physical Education, Health, and Recreation.
- Maryland, Herbert R. Steiner, Supervisor of Physical Education.
- Massachusetts, Ralph H. Colson, Supervisor of Physical Education.
- Michigan, Edwin G. Rice, Consultant in Physical Education, Health, Recreation, and Outdoor Education.
- Minnesota, Joe G. Neal, Supervisor in Health, Physical Education, Recreation, and Safety.
- Mississippi, D. R. Patterson, Co-ordinator of Health and Physical Education.
- Missouri, Oral W. Spurgeon, Director of Secondary Education.
- Montana, Charles Hertler, Chairman, Department of Health and Physical Education.
- Nebraska, Melvin Olson, Director, Health, Physical Education, and Recreation.
- New Hampshire, C. Paul Quimby, State Director, Physical Education and Junior High School Education.
- New Jersey, Everett L. Hebel, Assistant in Physical Education.
- New Mexico, Dorothy I. Cline, Director, Health, Physical Education, and Recreation.
- New York, Dr. George H. Grover, Director, Division of Health and Physical Education.
- North Carolina, Charles E. Spencer, Co-director, School Health Co-ordinating Service.
- Ohio, Paul E. Landis, Supervisor, Health, Physical Education, Recreation, and Safety.
- Oklahoma, Henry A. Vaughn, Director of Health, Safety, and Physical Education.
- Oregon, George Simio, Director, Health and Physical Education.

Pennsylvania, Dr. Elmer B. Cottrell, Chief, Health, Physical Education, and Recreation.

Rhode Island, Dr. Charles B. Lewis, Consultant, Health and Physical Education.

South Carolina, Fred T. Brown, Supervisor of Physical Education.

Tennessee, Charles Kerr, Acting Director, Division of Health Education.

Texas, Lewis Spears, Consultant in Safety Education.

Utah, Dr. Vaughn L. Hall, Director, Health, Physical Education, and Recreation.

Vermont, Raymond B. Magwire, Director, Division of Health and Physical Education.

Virginia, Harold K. Jack, Supervisor, Health and Physical Education, Safety, and Recreation.

Washington, Marjorie Eastabrooks, Supervisor, Health and Physical Education.

West Virginia, Clarence Brock, Supervisor of Health, Physical Education, and Recreation.

Wisconsin, Orlo W. Miller, Co-ordinator of Health, Physical Education, and Safety.

Since these officials change from time to time, mail sent to them should be addressed to the incumbent by his title as well as by his name.

The Young Men's Christian Association. In 1841 George Williams, an Englishman, started the movement that developed into the Y.M.C.A. in 1844. The purpose was almost entirely religious. This movement spread to other countries, including the United States, where the first American Y.M.C.A. was formed in 1851 at Boston. Little or no consideration was given to physical education until 1856, when the National Convention proposed establishing gymnasiums. This proposal met with approval, and, in a few years, provisions were made in some of the buildings for physical activities. This aspect has developed until practically all branches today provide for a number of phases of physical education.

There was a scarcity of qualified men to serve as physical directors in the early days, and it became necessary to train men of sound character who could do this work. One of the first Christian physical directors was Robert J. Roberts of Boston, who did much in the way of volunteer leadership to expand his own program. His leaders' clubs provided young men who were employed by other associations as professionals.

In 1885 the Springfield Y.M.C.A. College in Springfield, Mass.,

established a department of physical education that was headed by Luther Halsey Gulick, the first secretary for physical education on the Y.M.C.A. National Council Staff, and he employed, Robert J. Roberts as one of his instructors. Gulick continued his dual role in the organization until 1901.

In 1890, what is now George Williams College was founded in Chicago and carried on summer work on Lake Geneva in Wisconsin for the training of physical education secretaries and those responsible for other phases of work.

Leadership at these training schools was provided by men who were influential not only in the Y.M.C.A. but in physical education and medical circles outside the association. Dr. James H. McCurdy succeeded Dr. Gulick at Springfield College and served until the late thirties, when George Affleck became active head of the department. Following World War II, Arthur A. Esslinger gave leadership to the physical education department at Springfield College, and he, in turn, was succeeded by Ellis H. Champlin.

Leadership at George Williams College was provided by Dr. Henry F. Kallenberg, who was succeeded by Martin I. Foss. He was followed by Charles G. Giauque, and then Arthur H. Steinhaus was named director.

The world-wide games of basketball and volleyball were both developed through Y.M.C.A. initiative. Basketball was devised in 1891 by James Naismith at Springfield College, and volleyball by William Morgan, a Y.M.C.A. physical director at Holyoke, Mass.

In 1896 the Athletic League of the Y.M.C.A.'s of North America was formed. This provided the organization for formal competition within the Y.M.C.A. and helped weld the association into an operating unit.

In 1901 the magazine, *Physical Training*, was started by Dr. Gulick, and, in 1903, when the Physical Directors' Society of North America was organized, the society assumed responsibility for this publication. In 1927 the name of the publication was changed to *Journal of Physical Education*, and it continues to the present time under this title.

In 1923, when the former Y.M.C.A. organization was reformed and the National Council of the Y.M.C.A.'s of the United States was organized, the executive committee of the Athletic League of the Y.M.C.A.'s of North America was used as the basis for the National

Y.M.C.A. Physical Education Committee, commissioned by the National Board of the National Council. Leadership for the national work as noted earlier was provided by Dr. Gulick. The position was filled from 1906 to 1919 by Dr. George J. Fisher. Dr. John Brown, Jr. carried the responsibilities for twenty years, to 1939, when he was shifted to another assignment and then retired the next year. In May, 1943, Dr. Harold T. Fricrmood, formerly physical director at Dayton, Ohio, Y.M.C.A. was named to the national post, and he continues to the present time.

A group of European Y.M.C.A. physical directors who had studied at the extension department of Springfield College set up in Geneva, Switzerland, conceived the idea of a World Basketball Federation in the late twenties or early thirties. This was formed with a modest beginning and grew rapidly. Through this organization it was possible to have basketball included in the Olympic Games in 1936, and, at the present time, some seventy countries of the world are members of the World Basketball Federation.

In 1947 the World Volleyball Federation was established in Paris, and the United States had two official delegates to the organization meeting. The initial membership of twelve charter nations has now grown to sixty countries, and volleyball was included for the first time in the Pan-American Games in Mexico City in 1955.

Throughout the Y.M.C.A. emphasis has been placed upon health and fitness since the early days. The value of play, relaxation, constructive recreation, and adequate physical activity have always characterized Y.M.C.A. programs. The first Y.M.C.A. swimming pool was built in 1885, and at the present time the Y.M.C.A. owns and operates some 700 indoor pools and carries on aquatic programs in some 700 resident camps.

With the emphasis upon coeducational activities and family education, an increasing number of women and girl members has been recorded each year until, at this writing, 17 per cent of the more than three million Y.M.C.A. membership consists of women and girls.

The Physical Education Department of the Y.M.C.A. aims to develop physical, mental, and moral efficiency in its members by means of exercise, recreation, and education on a group as well as on an individual basis.

The purpose of the Young Men's Christian Association continues

through the years as seeking to develop Christian personality and a Christian society, and it has utilized these principles and this fellowship for the benefit of all.

The Young Women's Christian Association. The Young Women's Christian Association originated in England about 1860. At that time the purpose was almost entirely religious. The first Y.W.C.A. in America was established in Boston in 1866 under the leadership of Mrs. Henry Durant; but not until 1877 was any significant attempt made to introduce physical education as a phase of the work of the organization. The introduction took the form of a calisthenics class, which was soon copied by other nearby associations. To this type of activity was added games and recreational activities. This aspect of the work proved interesting and progressed rapidly. In 1884 one floor of the new building in Boston was given over to Durant Gymnasium, and Miss Anna Wood, from the Wellesley College faculty, was secured to direct the activities of this first Y.W.C.A. gymnasium. By 1890 physical education work was closely identified with the Y.W.C.A. Many buildings were provided with gymnasiums.

The fourfold aim of the Boston Y.W.C.A. at this time, which stressed the elevation of women physically, mentally, morally, and spiritually, was generally accepted by other associations. The physical education program aimed to provide for the young women not in college what the college program provided for those who were there.

The first swimming pools were opened in 1905 in Buffalo, N. Y., and Montgomery, Ala. Today, nearly all new buildings have pools. In 1908 training schools were provided to prepare leaders in physical education for the Y.W.C.A.

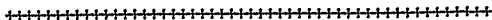
The Y.W.C.A. has extended to foreign lands, and trained leaders are sent there from the United States to take charge of physical as well as religious activities.

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Tests and Measurements in Physical Education



A Brief Review of Physical Education Testing in America. Testing and measuring is by no means a recent innovation in the program of physical education in the United States. Hitchcock, at Amherst, starting in 1861, and Sargent, at Harvard, beginning in 1880, were pioneers in the use of anthropometric measurements as applied to a physical development program. Sargent was also instrumental, in common with a number of other physical educators of his time, in developing the widespread popularity of strength tests during the period from approximately 1880 until around 1900. The intercollegiate strength test which was developed by Sargent and his group has been somewhat revised, first by F. R. Rogers,¹ and second by McCloy,² and in its new form is used extensively in the present-day program of physical education.

Advances in knowledge concerning the physiology of the heart and circulation brought a change in emphasis from pure muscle building to improvement in physiological functioning and in all-round physical condition; and with this change in viewpoint came an emphasis on cardiovascular tests. These tests, however, failed to strike the fancy of the physical educators of that period, and although several types of such tests were developed, few have been widely used.

At about the turn of the century, various types of physical ability tests began to receive widespread attention. The most popular of

¹ Frederick Rand Rogers, *Fundamental Administrative Measures in Physical Education* (Newton, Mass., The Pleiades Company, 1932).

² C. H. McCloy, and N. D. Young, *Tests and Measurements in Health and Physical Education* 3d ed. (New York, Appleton-Century-Crofts, 1954), ch. 14.

these consisted of various combinations of the track and field type of events, and such tests have continued to grow in popularity. Other types of ability tests, largely because they did not seem to be too directly connected with program needs or because they lacked objectivity, failed to arouse enough enthusiasm to cause them to be extensively used.

These earlier testing programs, because of the strenuous nature of the physical activity programs which they encouraged, were largely restricted to the colleges and universities. Not until about 1908, when the Cleveland and New York public school systems organized their athletic leagues, was there any well-organized attempt at testing public school children. In 1913, the Playground and Recreation Association of America (now the National Recreation Association) published the Athletic Badge Test for Boys.³ This marked the first concerted effort at testing physical ability of public school children on a nation-wide scale. Tests of this type, however, had been in use for some years in a number of playgrounds and school systems. During the next few years most of the larger school systems introduced some testing and measuring programs into their physical education curricula. The Detroit⁴ and the California⁵ Decathlon Tests were notable examples of early testing programs which have, with some slight modifications, retained their popularity, and they may safely be used today as models to be followed in setting up similar programs.

The brief history of early testing in this country, which has just been reviewed, should convey to the reader the attitude of the pioneer leaders in physical education toward testing and measuring in this field. A vast majority of the physical educators today do not share this enthusiasm for testing and are prone to resist attempts to set up such programs. Their chief criticisms are that many of the available tests are neither reliable nor valid and that a testing program to meet their needs would involve too much time and, in many cases, too much expense. These criticisms are rapidly being overcome through the progress that has been made in the improvement of tests for physical education. Reliable and

valid tests of various skills, abilities, and capacities are now available. One or two weeks at the most should suffice for testing every boy and girl in school, and this, in connection with the increased time allotment for physical education which is becoming more prevalent, would enable the physical educator to improve vastly his physical education program.

Testing as an Educational Procedure. Progressive physical educators agree that the education of every boy and girl is not complete without a systematic and well-organized program of physical and health education. It has been relatively easy to convince the well-trained, broad-minded educator that such a program is a necessity; but to convince him that present-day practices in physical education are educationally sound has not been as easy. The chief criticisms offered by the general educator are: (1) that physical activity programs are not well organized, and (2) that the testing and grading methods employed are not up to the standards of such testing devices for other subjects.

The latter criticism is largely occasioned by the failure of the physical educator to plan his testing program purposefully and to use the results to improve, motivate, and evaluate the results of his program in terms of his objectives. Until testing programs are more intelligently conceived, carried out, and interpreted, they will not be considered as important adjuncts to the general educational program.

Fundamental concepts of testing. Before any teacher can serve his pupils to the best advantage, it is quite obvious that he must study each individual in terms of his or her *innate capacities* and *present abilities*. All tests are designed to measure one or other of these two factors; the vast majority are tests of general ability or of specific skills or knowledges. Tests of intelligence and aptitude are especially valuable to the classroom teacher in that they furnish an index of what to expect from each individual in the classroom. Tests of general motor capacity are equally valuable to the teacher of physical education.

Intelligent procedures in testing in physical education aim at measuring not only the pupil's present ability but *his ability relative to his capacity*. This measurement of ability relative to capacity gives an index to the extent of his development; in other words, it tells how good or how poor the pupil is in proportion to what he should

be able to do, and, as such, this type of test score is most valuable to the teacher in his efforts to serve the individual.

The importance of test interpretation is illustrated by the queries of the serious-minded pupils who, before attempting a chinning test, will ask specifically, "How many times should I be able to chin myself?" or, having been told that he had jumped a certain number of centimeters in the Sargent jump, asks, "How good is that?" or "What is a good jump?" Questions such as these are indicative of pupil interest in testing, and if this attitude upon the part of the pupil is to be maintained, it is important that the tester be able to give him intelligent answers on the spot. This requires the use of tests for which norms or standards are available, and these norms should be kept where they can readily be referred to when they are needed to answer questions by pupils. Another method is to post the standards where the students can read the answers.

It is unfair to expect all students to achieve equal performances in any type of physical capacity or ability tests, because some may be laboring under severe handicaps, and others may have distinct advantages. Such factors as physique, training, agility, strength, and various sensory or neuromuscular co-ordination should be considered in interpreting deviations from the norms for such tests. In strength testing, size and maturity must be considered; in testing sport skills, innate physical capacity, previous training, and physical disabilities should be taken into consideration. In attempting to measure nutritional status, not only should age, sex, height, and weight be taken into consideration, but other measures which determine body build, the amount of fat on the body, muscular development, and so forth should be considered.⁹ Such knowledge of significant elements is vital to the intelligent interpretation of the test results and the tester should always keep this concept uppermost in his mind when passing judgment on his students.

Another concept which is well known but still merits some discussion is that of measuring improvement. Progress is the aim of all education, and appreciation of progress provides the incentive

⁹ C. H. McCloy, *Appraising Physical Status: Methods and Norms*, University of Iowa Studies in Child Welfare (Iowa City, Iowa Child Welfare Research Station, 1936), Vol. 15, No. 2, now out of print. See also, McCloy and Young, *op. cit.*, ch. 28.

for both pupil and teacher to carry on. In physical education, progress in specific activities can be measured quite objectively and the pupil often feels real satisfaction because this improvement is so easily recognized. Increased speed in running and increased distance in jumping and throwing can be readily measured. Increases in the number of times that one can "chin" or do push-ups or sit-ups can be readily counted, and they are important in assessing the individual's physical condition.

An important point that is often overlooked is that equal amounts of increase at different levels of ability are not necessarily indicative of equal amounts of improvements or progress. For example, to increase one's speed in the 100-yard dash from 11 seconds to 10.8 seconds is not so great an achievement as increasing one's speed from 10 seconds to 9.8 seconds. Overlooking this simple concept offers a grave injustice to the more advanced pupil and causes the teacher to misinterpret the significance of the improvement. McCloy studied the principle underlying such unequal increment of point values, particularly as related to track and field events.⁷ These increments seem to be dependent upon the amount of power developed relative to the weight of the individual. In general in the track and field type of events the amount of increment in points increases as the level of performance increases. For example, the following figures for the 60-yard dash are illustrative:

<i>Time</i>	<i>Points</i>	<i>Increment</i>
6.0 seconds	900	87
6.2 seconds	813	
7.0 seconds	558	48
7.2 seconds	510	
8.0 seconds	365	28
8.2 seconds	337	
9.0 seconds	249	17
9.2 seconds	232	

Similar tables have been formulated for tests of endurance not involving speed as an essential factor, such as tests of chinning, push-ups, sit-ups, and squat jumps. The increment in points in such

⁷ C. H. McCloy, *Measurement of Athletic Power* (New York, Barnes, 1932), now out of print.

tables is usually a negative rather than a positive one. Thus, it is easier to improve from 30 to 32 chins than it is to improve from 2 to 4 chins. The physiological bases for these two types of increment are not very well understood—or at least there has been little experimental evidence presented that supports the hypotheses presented—but the facts of such increments are well known.

Testing for a Purpose. Tests and measurements are useful only if they help the teacher to do a better piece of work. Consequently, except for the use of tests for research purposes, testing should be limited to those tests which are to be used to achieve a definite educational purpose. The custom in the past has too often been to test every pupil in a haphazard manner, then to file the scores away without more than a cursory examination of them. This wasteful procedure has been one cause for condemning the use of tests generally. It stamps the entire program as lacking in educational values and unworthy of professional respect. The instructor, in fear of being accused of laziness, incompetence, or of not "being progressive," puts on a show of testing for the benefit of his administrative superior—and then neglects to utilize the results. It is no wonder that many physical educators regard such testing as unnecessary and that many educational administrators question the validity of physical education programs.

One of the more common errors in interpreting test results is that of expecting a test to give information for which it was not designed. This error is a natural outcome or lack of purpose as well as of ignorance of the broad field which testing covers at the present time. Misinterpretation of tests may be worse than not testing at all; consequently, it behooves the tester to make a careful selection of his tests, to keep in mind the purpose, or purposes, for which each test is to be utilized, and to keep in mind the inherent nature of each test. Very briefly, the entire testing program should be planned with one or more of the following purposes in mind: classification of students, guidance, grading, motivation, measuring progress toward objectives, and research. We shall discuss each of these purposes in turn.

Classification of students into homogeneous groups. Many differences exist between activity programs in physical education and in other educational fields. The chief difference, and perhaps the most fundamental, is the difference in social relationships. Learning in many

of the academic subjects is more or less a subjective, individual affair. In physical education, however, the learning process is an overt one, and the results are readily apparent to all fellow students. The boy or girl who constantly falls behind his group in performance is apt to be regarded as inferior by them, and the individuals who are far superior to their groups tend to feel that there is little challenge to their abilities. The student's attitude toward the whole program is frequently influenced by the degree to which he is placed in a group of those of approximately his own performance level. The solution to this problem lies in a homogeneous grouping of the entire student body on the basis of sex, size, maturity, strength, speed, and skill.

The simplest approach to this problem of homogeneous grouping is grouping based on sex, age, height, and weight. McCloy⁸ and Cozens and his co-workers⁹ have worked independently for the past twenty years on this problem and have obtained almost identical results. This type of grouping, to which McCloy has given the name of The Classification Index, is more applicable to boys than to girls. McCloy gives no norms for girls in this type of index, but Cozens and his associates have given such norms, though the correlations between the index and the performance for girls are low. This type of index does not take into account strength, speed, or skill. It is, however, a very easy and convenient way to classify students.

A much more accurate method of classification is that given by McCloy's test of general motor capacity.¹⁰ This test is made up of the Sargent jump, the ten-second squat thrust, the Iowa Brace Test, and the Classification Index (for boys only: Classification Index is omitted in the girls' test). This test battery tends to give a composite measure of speed of muscular contraction, of agility, and of an all-round type of motor educability, in addition to the measurement of size and maturity offered by the Classification Index. This test results in a *General Motor Capacity Score* which is comparable to mental age in intelligence testing, or to a total intelligence test score. The test score can be turned into the Motor

Quotient, which is comparable to the *intelligence quotient in the intellectual field*, by dividing 100 times the General Motor Capacity Score by the norm for the Classification Index in boys or the norm for age in girls.

In addition to this total test score, the individual items can be further analyzed. This, however, will be discussed below under the heading of guidance.

A somewhat simpler test for classification is the Physical Efficiency Index, which is composed of the standing broad jump, a shot-put from a stand (8-pound shot for boys, 6-pound shot for girls), and weight.¹¹ These three scores, when properly combined, correlate very highly indeed with the individual's ability to perform. The test does not tell as much or give as many facets of the individual's physical capacity as does the General Motor Capacity Score or the Motor Quotient, but it can be administered very rapidly and correlates very highly with performance in other skills.

Guidance. The average physical educator is often at a loss to explain or to prescribe corrective measures for the shortcomings of his poorer pupils. To prescribe a program of activity which will most effectively bring about rapid improvement requires a definite knowledge of handicaps, limitations, and weaknesses. This knowledge can be obtained only through a well-planned testing program intended to give a profile of individual strengths and weaknesses. To illustrate how such a profile can be obtained from the scores recorded, let us illustrate from the tests mentioned above under the heading of the General Motor Capacity Score. We will set up an hypothetical situation in which test scores might aid in guiding the teacher to aid his pupils. Let us assume we have a junior high school boy, 12 years of age, with the following test scores:

1. Sargent jump	40 centimeters
2. Squat thrust	5 times
3. Iowa Brace Test Score	10 points
4. Classification Index	722

In addition to computing the General Motor Capacity Score, each of the first three test items may be assessed in terms of what is usually called a T-score. The T-score is much like a standard score

¹¹ *Ibid.*, pp. 161-164.

but is usually computed from percentiles, assuming a normal distribution of *ability*, but not of the *test scores*.¹² In this case, 50 will represent the average score, 60 will represent one standard deviation above the average score, 70 two standard deviations above the average score, and so forth. Forty represents one standard deviation below the average score, 30 two standard deviations below the average score, and so on. When the data for the boy whose records are recorded above are interpreted in terms of T-scores, we find the following results:

<i>Test</i>	<i>T-score</i>
1. Sargent jump	60
2. Squat thrust	39
3. Iowa Brace Test	36

From a table of T-scores, the instructor would note that in the measure of explosive muscular power (the Sargent jump), the pupil is one standard deviation above the average, so that he is in the top 15 per cent of all boys of that age and size. In the squat thrust, however, he is 1.1 standard deviations below the average, and 86 per cent of the boys will be superior to him in agility and big-muscle co-ordination. In his Iowa Brace Test, he is 1.4 standard deviations below the average; hence, almost 92 per cent of the boys will have a higher degree of motor educability than he. In other words, here we see a boy high in speed and ability to deliver power, but low in agility and still lower in motor educability. He will have speed but will probably learn slowly and be somewhat awkward. The teacher would conclude that in coaching this individual he need not pay too much attention to developing speed or strength but that he should proceed rather slowly and carefully in teaching him form and techniques. He will be slow to learn and may require almost endless repetition to learn skills, but in the long run he may be able to learn them well and should turn out to be an excellent athlete. In all probabilities such a boy would not readily make a varsity team in team sports or in individual sports requiring a high degree of skill, but he may readily make the team in sports such as running, which primarily require him to develop power and yet do not require too great an amount of skill. This type

of pupil should be guided into the kinds of sports which do not require high degrees of skill but where satisfactions come from achievements requiring physical prowess.

There are numerous other types of measures which may be used for diagnostic purposes. The illustration above will, however, suffice to illustrate the point.

Grading. The complexity of grading methods are treated more fully elsewhere in this text, and further mention of the educational value of scientific grading may seem repetitious; however, the problem is closely related to the testing program, and its final solution must be based in part upon a sound selection of tests. In this connection in physical education, it is possible to give grades based partly upon ability relative to capacity. The correlation between tests of general motor capacity and achievement test scores is high. This would be somewhat comparable to giving grades in classroom subjects in relation to the intelligence quotient or mental age. In school work, this is frequently not feasible. For example, one would not wish to graduate a physician from a college of medicine and license him to practice simply because he had done wonderfully well for a moron. One would not wish to have his legal practice turned over to an individual who had been graduated from law school because he had done excellent work for an individual with an I.Q. of 80. In these fields, absolute grades seem to be the most desirable. In the field of physical abilities, it may be preferable to grade the individual relative to his capacity. Thus, he is encouraged by being given full recognition for how hard he tries. This, of course, is not in accord with the not unusual practice of requiring the scores to be distributed according to the normal curve. If, however, justice to the pupil would indicate the desirability of the departure from the academic worship of the binominal curve, it would seem the part of wisdom to so depart.

In physical education testing, it is frequently feasible "to announce the examination question in advance." To give out the examination questions in arithmetic a semester before the individual was to take the examination would probably result in everyone's getting—though not necessarily deserving—an A. To announce that the all-around score in four track and field events—naming the events—will be used as one of the term examinations does not insure that every one of the pupils will break the world's records in these

events. To announce the twenty apparatus or tumbling stunts which will be used as an examination at the end of the learning period does not insure that everyone will have passed all of those tests. It does, however, give direction to the practice and gives each individual an opportunity to know what his goals are to be. This type of objective testing offers possibilities in the area of physical education which are not readily achievable in the area of the classroom studies.

Motivation. Most educators hold the opinion that testing and measuring are worthwhile if they serve no other purpose than that of creating a greater interest in the activity program. Many self-testing devices of a stunt nature as well as the tests mentioned elsewhere in this chapter indicate to the boy or girl the progress being made and his or her status relative to the group. If the group is a fairly homogeneous one (preferably homogeneous with regard to general motor capacity), this will serve to motivate the vast majority of the pupils. Such increased incentives tend to raise the general level of class performance, and if, further, the grading is upon the basis of grades relative to general motor capacity, even the lower 5 or 10 per cent of the group may be encouraged and strongly motivated in spite of the fact that they will still be at the bottom of the group. Incidentally, it is found that with good teaching, those who are, at the beginning, at the low end of a probability distribution improve very much more than those near the mean and still more than those near the top. In other words, the spread of the distribution will be greatly narrowed toward the high end. The curve becomes narrower but higher. This is a desirable outcome of both testing and teaching.

Measuring progress toward accomplishment of objectives. Educational progress is best made by first clearly defining the objectives toward which the educational process should point. Then the educator should set up the educational processes designed to achieve those objectives. Third, he should attempt to measure pupil achievement to see whether or not his educational procedures have been successful. In the field of physical education, the tests lend themselves especially well to this end. Hence, one of the most important uses of tests is to measure progress toward the objectives. This knowledge is equally valuable to the supervisor. The objectives are as follows:

in character and personality. This type of measurement is represented by ratings of character or personality qualities and is based upon comprehensive studies of how best to assess these qualities accurately.

6. *Tests associated with health.* With the exception of the knowledge tests in this area, the other tests utilized are at the present writing less satisfactory than the most of those discussed above. The majority of these tests are represented by the so-called cardiovascular tests, which comprise counting of pulse rates and the measurement of blood pressures under various conditions of posture (such as lying, sitting, and standing), and of activity (such as before mild, moderate, or strenuous exercise and immediately after mild, moderate, or strenuous exercise), and the recovery rate of pulse rate following such exercise. In general, two types of such tests are most useful—neither, however, being widely used today. The first is the type of test represented by McCloy's¹⁵ Test of Present Condition, or the McCurdy-Larson Test,¹⁶ and such tests as the army test¹⁷ that is used to classify convalescents. These tests are used when individuals in classes or on athletic teams are recovering from bouts of sickness and where the teacher is not sure as to whether the individual is ready to participate wholeheartedly in the activity. Application of such tests are useful primarily to give negative information, that is, to show when the individual is in poor condition. This justifies the teacher of physical education in sending the individual to his family physician for a checkup before admitting him to the activity program, or at least putting him on a restricted reconditioning exercise program. This type of test may well be used to protect boys and girls who are playing on athletic teams from over-exploitation when they are not physically ready for such activity.

The second type of test is represented by one use of the Tuttle's¹⁸ Pulse-Ratio Test, which is rather well adapted to the detection of pathological hearts. Unfortunately, a large proportion of the smaller communities in the United States are still without school medical service. It is possible to detect the vast majority of pathological hearts by the application of this test. It should not, in any case, be thought of as substituting for a medical examination by a trained physician. Where, however, boards of education still refuse to supply such medical supervision, the teacher of physical education may well attempt to protect his pupils—particularly those who will participate in exceedingly strenuous athletic activities—by the use of this test which will detect almost all hearts which might be injured by excessive participation.

Use of tests for research. The foundation for progress in any science or any educational field is research. The tests mentioned in this

chapter are the results of research labors by men and women who have devoted much time to these problems. Research represents the advanced stage of study in any profession; and, consequently, many years of training and experience are required before one can safely attempt to use the techniques of research for the solution of problems involving the improvement of testing and measuring methods. The more advanced students who intend to enter the field of research, however, should become acquainted with the various techniques of research which apply to testing and to the development of tests. To the student not interested in doing research, knowledge of the techniques of research used will enable him to evaluate new tests as they appear in the literature.

Physical educators untrained in such research methods should not attempt to devise standard tests; instead to competent research workers in the field of testing and physical education should fall the task of producing valid and reliable tests. To do this well requires years of training in testing techniques plus a background of advanced statistical methods. The average physical educator should, therefore, be content to study and employ the testing techniques described and recommended by experts in this branch of physical education. For a description of the tests to be used, the student should refer to the standard textbook on tests and measurements.

A Knowledge Test of Sports. This test is presented as a means of stimulating interest, and testing knowledge, in the realm of sports. It is not assumed that it is worthwhile for a coach or a physical educator to become a walking sports-page summary, but, rather, that one is benefited by being conversant with certain aspects of sports in general. As a matter of fact, too high a score on this test may bespeak a waste of some of the precious hours of youth. By the same token, a very low score may disclose an appalling lack of interest in one of the most prominent topics of conversation in America today.

This test requires 200 answers dealing with names of sports places, trophies, performers, terms (official and unofficial), and "titles." It purports to present a sampling of each, rather than a complete list of all phases concerned. This is not a standardized test. However, indications, based on scores made by majors in physical

education classes, are that a score of 180 is excellent and a score of 100 or less is very poor.

FORM A

What particular sports events are connected with each of the following places? Locate them as to state, if they are in the United States, or as to country if they are foreign.

- | | |
|---------------------------|---------------------------|
| 1. Interlachen | 14. Polo Grounds |
| 2. Poughkeepsie | 15. Indianapolis Speedway |
| 3. St. Moritz | 16. Thames River |
| 4. Lake Placid | 17. Cannes |
| 5. Cary Slide | 18. Wrigley Field |
| 6. Forest Hills | 19. Rose Bowl |
| 7. Wimbledon | 20. Ebbets Field |
| 8. Churchill Downs | 21. Longchamp |
| 9. Epsom Downs | 22. Meadowbrook |
| 10. Soldiers Field | 23. Lake Tahoe |
| 11. Daytona Beach | 24. Saratoga |
| 12. Tia Juana | 25. Waikiki |
| 13. Madison Square Garden | |

FORM B

Part I—With what sports events are the following awards connected?

- | | |
|-----------------|----------------------|
| 1. Stanley Cup | 7. Ryder Cup |
| 2. Childs Cup | 8. Gold Cup |
| 3. Astor Cup | 9. Harmsworth Trophy |
| 4. Wightman Cup | 10. Snyder Cup |
| 5. Walker Cup | 11. Parker Cup |
| 6. Davis Cup | |

Part II

1. What American league pitcher had the lowest earned run average per nine innings last year?
2. Who won the Kentucky Derby last year?
3. How many undefeated, untied major football teams were there last year?
4. Who won the Decathlon in the last Olympic Games?
5. A good racing dog can run 440 yds. in approximately what fraction of the time that a good 440 man can?

6. Name the leading home-run hitter in the major leagues last year.
7. Where is Henry Iba coaching?
8. Where is Bud Wilkinson coaching?
9. What was the score of the Rose Bowl football game last year?
10. What country won the Davis Cup last year?
11. What country will be host to the next Olympic Games?

FORM C

For what are (or were) the following noted in sport?

- | | |
|-------------------------|----------------------------|
| 1. Tenley Albright | 35. Sal Maglie |
| 2. Alan Ameche | 36. Mickey Mantle |
| 3. Paul Arizin | 37. Bob Mathias |
| 4. Roger Bannister | 38. Willie Mays |
| 5. Patty Berg | 39. Cornelius McGillicuddy |
| 6. Terry Brennan | 40. George Mikan |
| 7. Howard Cassidy | 41. Bobby Morrow |
| 8. Dick Cleveland | 42. Bronko Nagurski |
| 9. One Eyed Connolly | 43. Needles |
| 10. Glenn Cunningham | 44. Byron Nelson |
| 11. Ned Day | 45. Parry O'Brien |
| 12. Mildred Didrickson | 46. Barney Oldfield |
| 13. Harrison Dillard | 47. Francis Quimet |
| 14. Walter Eckersall | 48. Jesse Owens |
| 15. Robin Freeman | 49. Andrew Payne |
| 16. Althea Gibson | 50. Pheidippides |
| 17. Pancho Gonzales | 51. Amelia Earhart Putnam |
| 18. Otto Graham | 52. Robert Richards |
| 19. Sonja Henie | 53. Floyd of Rosedale |
| 20. Carol Heiss | 54. Bill Russell |
| 21. Crawford Henry | 55. Earl Sande |
| 22. Tommy Hitchcock | 56. Wes Santee |
| 23. Lewis Hoad | 57. Arnold Sowell |
| 24. Ben Hogan | 58. Casey Stengel |
| 25. Rogers Hornsby | 59. Louise Suggs |
| 26. Sim Iness | 60. John L. Sullivan |
| 27. James Jeffries | 61. Jim Thorpe |
| 28. Hayes Allen Jenkins | 62. Tony Trabert |
| 29. Robert T. Jones | 63. Stella Walsh |
| 30. Jack Kramer | 64. Cornelius Warmerdam |
| 31. Ford Konno | 65. Ted Williams |
| 32. Vladamir Kutz | 66. Gar Wood |
| 33. John Landy | 67. Fielding Yost |
| 34. Don Larson | |

FORM D

The following are official and unofficial terms used in the sports world today—please explain them. In event they apply to more than one sport explain for each sport if you can.

- | | |
|-------------------------|----------------------------|
| 1. Natator | 26. A hit |
| 2. Grappler | 27. An error |
| 3. Gridiron | 28. Two down |
| 4. Step in the bucket | 29. Mashie |
| 5. The hot corner | 30. Fungo |
| 6. The keystone sack | 31. Racket press |
| 7. Birdie | 32. Slice |
| 8. Stymie | 33. The green |
| 9. Eagle | 34. Hit the dirt |
| 10. Two up | 35. Triple threat man |
| 11. First and ten | 36. Set-up man |
| 12. Clipping | 37. Spiker |
| 13. Right in the groove | 38. Ground stroke |
| 14. Let ball | 39. Timber topper |
| 15. Deuce | 40. Harrier |
| 16. Fifteen-forty | 41. Wing back |
| 17. Thirty-love | 42. Strong side |
| 18. Par | 43. An ace |
| 19. Double foul | 44. A duffer |
| 20. Three and one | 45. An upset |
| 21. A hook | 46. A round |
| 22. Crooked arm | 47. Chucker |
| 23. Portsider | 48. Puck |
| 24. Offside | 49. Set-up |
| 25. Dead to the pin | 50. Grunt-and-groan artist |

FORM E

Please list after each of the following "titles" the name or names in sport most commonly connected with it.

- | | |
|---------------------------|-------------------------------------|
| 1. The World's Best Loser | 11. The Manassa Mauler |
| 2. The Haig | 12. The Big Train |
| 3. Larruping Lou | 13. The Grand Old Man of Football |
| 4. Bantam Ben | 14. The Flying Finn |
| 5. Leo the Lip | 15. The Bounding Basque |
| 6. The Flying Dutchman | 16. The Lone Eagle |
| 7. The Horse | 17. The Four Horsemen of Notre Dame |
| 8. Golden Greek | 18. The Czar of Baseball |
| 9. Gentleman Jim | |
| 10. The Galloping Ghost | |

- | | |
|---|--|
| 19. Inventor of Basketball | 28. Old Satch |
| 20. Slammin' Sam | 29. Stan the Man |
| 21. The Sultan of Swat | 30. Baseball's Little Napoleon |
| 22. The Man Mountain | 31. Lil' Arthur |
| 23. Big Six | 32. The Goose |
| 24. Little Poker Face | 33. The Wild Bull of the Pampas |
| 25. Crazylegs | 34. The Brown Bomber |
| 26. "Big Bill" and "Little Bill" in
Tennis | 35. Football's Mr. Inside and
Mr. Outside |
| 27. The Strangler | 36. Wilt the Stilt |

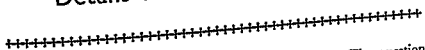
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APPENDIX A

Details of Selecting Objectives



Methods of Subjecting Objectives to Criteria. The question arose as to whether the major criterion, the supporting criteria, or the explanatory items under the supporting criteria (in case there are such items) should serve as the basic units to which the objectives were subjected. After considerable experimenting, it was found that the following served satisfactorily:

Zoology	I, A, B, C, D.
Sociology	I, A, B, C, D, E.
Psychology	I, II, III, IV, V, VI, VII.
Transfer	I, A, B, C, D.
Education	I, A, B, C, D, E, F, G.

In Zoology, Sociology, and Transfer the supporting criteria are used, in Psychology the seven major criteria, and in Education the seven major goals. When explanatory items are used as the basis for making decisions, little is added to the value of the final judgment as the objectives are applied to them. By using the major criterion alone in Zoology, Sociology, Transfer, and Education, too many important factors are eliminated. Indications are that in a work of this type, too great detail in criteria or objectives makes for confusion and an unnecessary burden of insignificant items. In only a few cases are the results changed by submitting subobjectives, in turn, to the criteria rather than submitting the objectives as a whole, including the subobjectives, as influencing factors. Neither extreme detail nor exceptionally large units serve as well as those somewhere between the extremes. Moderation seems to be a good plan.

The criteria from four related fields are outlined in Chapter 2 (pp. 24-26) under their respective headings. One section each is

devoted to Zoology, Sociology, and Education, and two sections are devoted to Psychology. The second psychological section deals with Transfer. Each objective and subobjective is subjected, in turn, to each criterion and marked by those it satisfies or of which it meets the condition stated, and by those it fails to satisfy or meet the condition stated. Only those criteria which do not apply are omitted after each objective or subobjective. *The criteria that the objective or subobjective satisfies are merely indicated by their appropriate headings, numbers, and letters; those that it does not satisfy are indicated as above but preceded by a minus sign.* The author's judgment is the basis upon which the checking is done. The results of the checking are not presented as a final word—anyone who chooses may check the objectives by the criteria and rate them. The ratings given are believed to be essentially correct and defensible, however. In determining whether or not a criterion applies, is met favorably, or is met unfavorably by an objective, or in case it fits partially under all three, it is listed according to the condition it seems to satisfy best. The following method of notation is used in listing the criteria that apply after each objective:

Zool. *for zoology*
 Sociol. *for sociology*
 Psychol. *for psychology*
 Trans. *for transfer*
 Educ. *for education*

The respective numbers and letters are then used under their appropriate headings. For example:

Sportsmanship.
 "Sociol. I, B"

This means that sportsmanship meets sociological criterion "I, B" which states: "The objective should emphasize the character traits accepted as valuable in our society." Since, in this illustration, "Sociol. I, B" appears under sportsmanship, it applies to all subobjectives under sportsmanship. However, should it not appear under sportsmanship but under some subheads of sportsmanship, then it would apply only to those subobjectives under which it appeared. "—Sociol. I, B" appearing under "Attainment of strict discipline" means that attainment of strict discipline does not meet

that criterion favorably or that attainment of strict discipline is not a desirable social goal in the United States at the present time. "Sociol. I, A, B, C, D, E" under an objective means that all sociological criteria apply favorably or are met favorably by that objective. "Sociol. I, A, D, E" under an objective means that those three supporting criteria are met favorably by the objective. In several instances criteria apply very slightly to objectives, but apply favorably or unfavorably insofar as they do apply. In cases where they apply only slightly, they are followed by a question mark. This indicates that they are questionable and might as well be left out.

Rating of Objectives. In the total list of objectives there were some that did not meet both criteria I and II under Psychology. Those appear in a separate group with other unacceptable objectives. Each objective appearing in the group of unacceptable objectives is accompanied by the reason or reasons for placing it there. All objectives of questionable value according to the criteria employed are listed with the accepted objectives and are notated with their respective supporting and contrary criteria, as are the unquestioned objectives. It is not to be expected that all objectives selected as valuable for physical education meet all criteria successfully. In many cases the criteria do not apply. This, however, is not a condemnation of the objective except in the case of failure to meet most of the educational goals. Condemnation consists in being contrary to criteria or meeting criteria negatively. That is, an objective such as "Winning at any cost," which makes for poor citizenship, is condemned by the educational goals of good citizenship and ethical character, which physical education objectives must satisfy in order to be acceptable. Any objective that is condemned by any of the criteria is questionable since there are so many that are unquestioned. The disadvantage of the good or better is that they may crowd out or supplant the best available.

Many times there is little or no connection between stated and achieved objectives. One reason for the introduction of the criteria of transfer and efficient learning is to suggest an approach to the matter of achievement. The basis for selection of objectives should include answers to the questions: "Can they be attained?" and "How can they be attained?" In this section the criteria concerning how to attain are noted under the objectives that lend themselves favorably to methods of efficient learning. They are presented as constant

reminders of the fact that these are acceptable methods of attainment that can be used. By way of illustration let us consider the psychological criteria under the first objective stated:

I. To assist in providing for normal growth and development.

Psychol. I, II, VI, VII.

This means that (I) the human body is provided with a mechanism or mechanisms for normal growth and development, and (II) progress in attainment of normal growth and development is possible.

For the criteria of efficient learning it means that Psychol. III, IV, and V do not apply to this objective. Interesting exercise (III) is a little more valuable from the standpoint of physical growth than uninteresting exercise but not enough to merit the inclusion of this criterion. Correct practice (IV), which includes avoidance of errors, clear identification of connections to be made, provision for maturation, and proper fusion of elements, does not apply particularly to attainment of normal growth and development. Whether or not tasks provide satisfaction (V) has little or no influence on physical growth—much of the labor required of children is irksome to them. Since these three criteria do not apply in any appreciable degree, they are not included.

On the other hand, psychological criteria VI and VII are included because they do apply; that is, normal growth and development are attained more readily if individual differences are provided for (VI) and if certain elements are selected and stressed at times (VII). The contribution of physical education to this objective is made by means of exercise or rest as the case demands. Under criterion VI, for example, if one youngster is generally muscularly weak, another has a weak heart, still another is exceptionally strong, and many are average, the physical education procedure that takes these differences into account and provides suitable exercise to fit each case will contribute more to normal growth and development than the type that does not. If the youth with a weak heart is given the amount and kind of exercise which would be a normal dosage for the strong lad, he may cease growing and developing entirely. Criterion VII would involve taking into consideration the fact that there are in most classes some children who have an incipient

deformity of one type or another. If these cases are selected and given exercises that stress normal development of the part of the body involved, the objective under consideration will be more fully achieved. Stooped shoulders can be avoided—or corrected—by stressing erect standing. The West Point cadets furnish positive evidence of this fact.

List of Objectives and Corresponding Criteria. In the following list the objectives and subobjectives are classified under the major aims of physical education. The list is a reasonably comprehensive one, covering practically all aspects of the field as limited by the definition of physical education presented in Chapter 2: "Physical education is that part of all education which proceeds by means of, or predominantly through, physical activity."

DEVELOPMENT OF THE PHYSICAL BEING

I. *To assist in providing for normal growth and development.*

Zool. I, A, B, C, D

Psychol. I, II, VI, VII

Sociol. I, A, C, D

Educ. I, A, C, D, E, F

A. Of the skeletal system:

1. Muscles.
2. Bones.
3. Tendons.
4. Joints.

5. Ligaments.

B. Of organs and organic systems:

1. Excretory system.
2. Digestive system.
3. Respiratory system.
4. Circulatory system.

5. Nervous system.
6. Sense organs.
7. Glands.

II. *To assist in developing and maintaining sound and proper functioning.*

Zool. I, A, B, C, D

Psychol. I, II, VI, VII

Sociol. I, A, C, D

Educ. I, A, C, D, E, F

A. Of the skeletal system:

1. Muscles.
2. Bones.
3. Tendons.
4. Joints.

5. Ligaments.

B. Of organs and organic systems:

1. Excretory system.
2. Digestive system.
3. Respiratory system.
4. Circulatory system.

5. Nervous system.
6. Sense organs.
7. Glands.

III. *To assist in the development of endurance sufficient to meet the demands of the stress of life and a little bit more.*

Zool. I, A, B, C, D

Psychol. I, II, III, IV, V, VI, VII

Sociol. I, A, C, D?

Educ. I, A, C, D, E, F

- A. For a normal day's work.
- B. For additional evening occupation.
- C. To stand the strains incident to cases of illness or injury to other members of one's family.
- D. To do a reasonable extra assignment in case of floods, fires, storms, and the like.

IV. *To assist in developing strength enough to do normal life tasks without undue strain.*

- | | |
|---------------------|-------------------------------------|
| Zool. I, A, B, C, D | Psychol. I, II, III, IV, V, VI, VII |
| Sociol. I, A, C, D? | Educ. I, A, C, D, E, F |
- A. Tasks of regular occupation (including day laborers' tasks).
 - B. Recreational activities.
 - C. Activities about the home.
 - D. Emergency demands.
 - E. Special games and occasional contests.

DEVELOPMENT OF SKILLS AND ABILITIES

I. *Development of psychomotor skills.*

- | | |
|-----------------------|---------------------------|
| Zool. I, A, B, C, D | Trans. I, A, B, C, D |
| Sociol. I, A, C, D, E | Educ. I, A, B, C, D, E, F |
- Psychol. I, II, III, IV, V, VI, VII
- A. Quick adaptive choice.
 - B. Quick adaptive action.

II. *Development of proper co-ordination of special senses with body movement.*

- | | |
|----------------------|---------------------------|
| Zool. I, A, B, C, D? | Trans. I, A, B, C, D |
| Sociol. I, A, C, E | Educ. I, A, B, C, D, E, F |
- Psychol. I, II, III, IV, V, VI, VII
- A. Ability to time properly:
 - 1. Movement of entire body.
 - 2. Movement of some body part.
 - 3. Movement of some implement.
 - B. Ability to judge speed properly:

1. Of balls.	4. Of others in drills.
2. Of opponents.	5. Of life hazards (street cars, autos, and the like).
3. Of body.	
 - C. Judging distance:

1. Of balls.	
2. Of apparatus.	4. Of sidelines.
3. Of other persons.	5. Of goals.

D. Estimating force or shock:

1. Of implement or ball one is catching.
2. Of opponent on entire body or on a body part.
3. Of body against other objects.
4. Of body parts against opponent's.

E. Estimating weight:

1. Of implements.

2. Of other persons.

III. *Development of natural, racial activities.*

- | | |
|-------------------------------------|---|
| Zool. I, A, B, C, D | Trans. I, A, B, C, D |
| Sociol. I, A, C, E | Educ. I, A, B, C, D, E, F |
| Psychol. I, II, III, IV, V, VI, VII | |
| A. Running and walking. | L. Starting. |
| B. Jumping. | M. Stretching. |
| C. Vaulting. | N. Rolling. |
| D. Throwing. | O. Twisting. |
| E. Climbing. | P. Bending. |
| F. Mounting. | Q. Using principle of opposition. |
| G. Striking. | R. Lifting. |
| H. Dodging. | S. Applying principle of reciprocal innervation properly. |
| I. Swimming. | T. Pulling. |
| J. Balancing. | U. Pushing. |
| K. Catching self when falling. | V. Grasping. |
| | W. Swinging. |
| | X. Pouncing upon. |
| | Y. Diving. |
| | Z. Catching. |
| | A.A. Carrying. |
| | B.B. Dismounting. |

IV. *Development of general bodily control.*

- | | |
|---|---------------------------|
| Zool. I, A, B, C, D | Trans. I, A, B, C, D |
| Sociol. I, A, C, E | Educ. I, A, B, C, D, E, F |
| Psychol. I, II, III, IV, V, VI, VII | |
| A. Efficiency of movement. | |
| B. Grace of movement (proper carriage). | |
| C. Economy of energy. | |
| D. Kinesthetic development. | |

V. *Development of skills common to America generally, and to one's own locality particularly.*

- | | |
|--------------------------------------|---------------------------|
| Zool. I, A, B, D | Trans. I, A, B, C, D |
| Sociol. I, A, C, D | Educ. I, A, B, C, D, E, F |
| Psychol. I, II, III, IV, V, VI, VII | |
| A. Fundamentals of common athletics. | |
| Zool. I, C | Psychol. VI |
| Sociol. I, B, E | |

- B. Fundamentals of dancing.
 Zool. I, C Psychol. VI
 Sociol. I, B, E
- C. Fundamentals of stunts (self-testing).
 Zool. I, C Psychol. VI
 Sociol. I, B, E
- D. Fundamentals of dramatized physical activities.
 Zool. I, C Psychol. VI
 Sociol. I, B, E
- E. Fundamentals of corrective work.
 Sociol. I, E Psychol. VI
- F. Fundamentals of scouting and camp life.
 Zool. I, C Psychol. VI
 Sociol. I, B, E
- G. Fundamentals of a few drills.
 Zool. I, C —Psychol. VI
 —Sociol. I, B?, E

DEVELOPMENT OF PERSONALITY

I. Attainment of sportsmanship.

- | | |
|-------------------------------------|----------------------------|
| Sociol. I, A, B, D, E | Trans. I, A, B, C, D |
| Psychol. I, II, III, IV, V, VI, VII | Educ. I, B, C, D?, E, F, G |
| A. Courtesy. | F. Cheerfulness. |
| B. Truthfulness. | G. Justice. |
| C. Sympathy. | H. Fair play. |
| D. Poise. | I. Honesty. |
| E. Respect. | J. Usefulness. |

II. Attainment of leadership.

- | | |
|-------------------------------------|---------------------------|
| Sociol. I, A, B, C, D, E | Trans. I, A, B, C, D |
| Psychol. I, II, III, IV, V, VI, VII | Educ. I, B, C, D, E, F, G |
| A. Exhibition of responsibility. | |
| B. Exhibition of drive. | |
| C. Exhibition of enthusiasm. | |
| D. Exhibition of confidence. | |

III. Attainment of positive active qualities.

- | | |
|-------------------------------------|---------------------------|
| Sociol. I, A, B, C, D, E | Trans. I, A, B, C, D |
| Psychol. I, II, III, IV, V, VI, VII | Educ. I, B, C, D, E, F, G |
| A. Initiative. | D. Persistence. |
| B. Decision. | E. Courage. |
| C. Aggressiveness. | F. Energy. |
| Zool. I, A, B. | Zool. I, A, B. |

IV. *Attainment of positive mental attitudes.*

- Sociol. I, A, B, D, E
 Psychol. I, II, III, IV, V, VI, VII
 A. Self-confidence.
 B. Self-reliance.
 C. Morale.

Trans. I, A, B, C, D
 Educ. I, A, B, C, D, E, F, G
 D. Alertness.
 E. Enthusiasm.

V. *Attainment of self-control.*

- Sociol. I, A, B, D, E
 Psychol. I, II, III, IV, V, VI, VII
 A. Self-discipline:
 1. Avoiding swearing.
 2. Avoiding gambling (in games).
 B. Self-direction or guidance.

Trans. I, A, B, C, D
 Educ. I, B, C, D, E, F, G

VI. *Social co-operation.*

- Sociol. I, A, B, D, E
 Psychol. I, II, III, IV, V, VI, VII
 A. Understanding.
 B. Loyalty.

Trans. I, A, B, C, D
 Educ. I, B, C, D, E, F, G
 C. Obedience to leaders.
 D. Teamwork.

VII. *Attainment of efficiency.*

- Sociol. I, A, B, D, E
 Psychol. I, II, III, IV, V, VI, VII
 A. Responsibility.
 B. Dependability.
 C. Discrimination and judgment.

Trans. I, A, B, C, D
 Educ. I, B, C, D, E, F, G
 D. Ability to think to the point.
 E. Tendency to finish what is started.

VIII. *Attainment of sociability.*

- Sociol. I, A, B, D, E
 Psychol. I, II, III, IV, V, VI, VII
 A. Friendliness.
 B. Cheerfulness.

Trans. I, A, B, C, D
 Educ. I, B, C, D, E, F, G
 C. Ability to mix well.

PROVIDING FOR PRESTIGE FEATURES

I. *Presenting interesting performances or shows.*

- Zool. I, A, B, C
 Sociol. I, A, B?, C?, E
 Psychol. I, II, III, IV, V, VI, VII

Trans. I, A, B, D
 Educ. I, B, C?, D, E?, F

II. *Promotion of school spirit.*

- Zool. I, C?
 Sociol. I, A, B, D, E
 Psychol. I, II, III, IV, V, VI, VII

Trans. I, A, B, C, D
 Educ. I, B, C, D, E, F?, G

III. *Advertising school or institution.*

Sociol. I, A, B?, E	Trans. I, A, B, C, D
Psychol. I, II, III, IV, V, VI, VII	Educ. I, C, D, E?

PROVIDING FOR CULTURAL DEVELOPMENT

I. *Preparation for leisure time.*

Zool. I, A, B, C, D	Trans. I, A, B, C, D
Sociol. I, A, B, C, D, E	Educ. I, A, B, C, D, E, F, G
Psychol. I, II, III, IV, V, VI, VII	
A. Recreation (joyful).	
B. Doing acts well enough to enjoy the beauty of the performance.	

II. *Improvement of morale through improving body.*

Zool. I, A, B, C, D	Trans. I, A, B, C, D
Sociol. I, A, B, C, D, E	Educ. I, A, B, C, D, E, F, G
Psychol. I, II, III, IV, V, VI, VII	

III. (See Desirable Habits II and III.)

PROVIDING FOR MENTAL HYGIENE

I. *Eliminating or diminishing worry, through developing appropriate interests in physical activity.*

Zool. I, A, B, C, D	Trans. I, A, B, C, D?
Sociol. I, A, B, C, D, E	Educ. I, A, B, C, D, E, F, G
Psychol. I, II, III, IV, V, VI, VII	
A. Keeping violent excitement at a minimum.	
B. Avoiding sustained mental tasks—favoring moderate rather than extreme mental effort.	
C. Directing mental activity properly (giving pupils work they like).	

II. *Increasing general neural vigor.*

Zool. I, A, B, C, D	Trans. I, A, B, C, D
Sociol. I, A, B, C, D, E?	Educ. I, A, B, C, D, E, F
Psychol. I, II, III, IV, V, VI, VII	
A. Proper sleep and nourishment.	
B. Plentiful physical exercise, particularly of fundamental large-muscle groups.	

DEVELOPMENT OF APPLIED KNOWLEDGE

I. *Attainment of knowledge of rules.*

Sociol. I, A, D	Trans. I, A, B, C, D
Psychol. I, II, III, IV, V, VI, VII	Educ. I, B, C?, D, E?

II. *Attainment of knowledge of techniques and methods.*

Sociol. I, A, C?, D

Trans. I, A, B, C, D

Psychol. I, II, III, IV, V, VI, VII

Educ. I, B, C?, D, E?

A. Of performing units of the activity.

B. Of putting all together into the complete performance.

C. Of how to conduct one's self in the presence of others concerned.

III. *Attainment of knowledge of first aid.*

Sociol. I, A, D

Trans. I, A, B, C, D

Psychol. I, II, III, IV, V, VI, VII

Educ. I, A, B, C, D, E

A. How to care for self in an emergency.

B. How to care for others in an emergency.

IV. *Attainment of knowledge of proper health procedure, as related to physical exercise.*

Sociol. I, A, C, D

Trans. I, A, B, C, D

Psychol. I, II, III, IV, V, VI, VII

Educ. I, A, B, C, D, E

DEVELOPMENT OF DESIRABLE HABITS

I. *Establishment of a schedule of daily activities that fits one's own being.*

Zool. I, A, B, C, D

Trans. I, A, B, C

Sociol. I, A, B, C, D

Educ. I, A, B, C, D, E, F, G

Psychol. I, II, III, IV, V, VI, VII

II. *Acquiring the habit of cleanliness—skin, hair, teeth, nails, etc.*

Zool. I, B

Trans. I, A, B, C, D

Sociol. I, A, B, C, D

Educ. I, A, B, C, D, E, G

Psychol. I, II, III, IV, V, VI, VII

III. *Acquiring the habit of spending a portion of one's leisure time in enjoyable physical activity.*

Zool. I, A, B, C, D

Trans. I, A, B, C, D

Sociol. I, A, B, C, E

Educ. I, A, B, C, D, E, F, G

Psychol. I, II, III, IV, V, VI, VII

Unacceptable Objectives. An objective that is contrary to any of the seven established educational goals or to more than two of the criteria is not acceptable. Contrary criteria are preceded by a minus sign. There are, of course, innumerable possible objectives and sub-objectives that meet some of the criteria and goals favorably but are contrary to others. A subobjective such as, "Improvement in ability to pick pockets," although ridiculous, meets several criteria,

notably those of psychology and transfer, which do not ask if the learning is good or bad. It fails to meet about all others that apply. It is evident that no one could check all possible objectives that might be suggested; those plainly ridiculous are not considered. The objectives in the following list have been advocated, or are being advocated now, by some workers in the field of physical education. Some of them are pursued by many while being verbally denied in order to present a good front to the public. Accompanying each objective are the reasons why it has been eliminated.

I. Attainment of strict discipline.

—Sociol. I, B, C?, D?, E

—Psychol. III, V

This objective is contrary to present social practice (—Sociol. I, B) in that it stresses curbing and subjugating rather than expressing and enjoying. For the same reasons it is partially contrary to (C?) and (D?). Social contacts (E) are discouraged rather than encouraged by this objective. Its pursuit is generally uninteresting (—Psychol. III), and attainment is seldom satisfying (—Psychol. V).

II. Development of huge muscles.

—Zool. I, D

—Educ. I, A?, F

—Sociol. I, C

This objective stresses overdevelopment of certain body parts (—Zool. I, D) and emphasizes a physical trait not generally accepted as valuable in our society (—Sociol. I, C). Probably health is hindered in terms of a lifetime by development of huge muscles (—Educ. I, A?). Worthy use of leisure time is hindered by pursuit of this objective, for much time must be taken to attain it that might otherwise be spent on leisure-time preparation (—Educ. I, F).

III. Making winning the dominant motive.

—Zool. I, D

—Educ. I, A, C, E, F, G

—Sociol. I, A, B

In the desire to win, certain body parts are often overdeveloped (—Zool. I, D) and questionable social practices are often introduced (—Sociol. I, B). Winning at almost any cost is contrary to established social restraints (—Sociol. I, A). Moreover, this objective detracts from health (—Educ. I, A) in many cases. It makes for less worthy home members (—Educ. I, C) and poor citizenship (—Educ. I, E). The dominant drive to win crowds out leisure-time preparation (—Educ. I, F) and is contrary to development of ethical character (—Educ. I, G).

IV. Development of star athletes.

—Zool. I, D

—Educ. I, C?, E?, F

—Sociol. I, B

This often requires overdevelopment of certain body parts (—Zool. I, D). The adulation accorded star performers by the general public often encourages the development of certain undesirable traits, such as selfishness and too high self-esteem (—Sociol. I, B). The star may be a less worthy home member (—Educ. I, C) and citizen (—Educ. I, E) if he becomes accustomed to special privileges granted because of his special ability. Development of stars is directly contrary to leisure-time preparation (—Educ. I, F), which stresses the enjoyment to be gained from more general development.

V. *Improvement of reaction time.*

—Psychol. II

This objective is eliminated because possible progress toward its attainment is so small as to be of no importance.

VI. *Attainment of physical development through hard, formal, physical work-outs.*

—Trans. I

—Sociol. I, B, D, E

—Psychol. III, V, VI

This objective stresses social (—Sociol. I, B) and mental (—Sociol. I, D) traits not accepted as valuable in our society and provides for relatively few social contacts (—Sociol. I, E). Its attainment is not interesting (—Psychol. III) nor usually satisfying (—Psychol. V), and individual differences (—Psychol. VI) must be disregarded generally, for all follow the same routine. Transfer possibilities are poor because of the unfavorable attitudes developed and the general unstimulating mental content of the work.

There is no particular point to be gained in presenting an extensive list of unacceptable objectives. The above are among the more nearly acceptable ones that were eliminated. They serve very well to illustrate the method used in eliminating an objective from the acceptable list.

Classification of Objectives and Subobjectives. Since some objectives and subobjectives are supported much better by the criteria and goals than others, they are ranked as more worthy of pursuit. The classification is arbitrarily made into two classes:

1. Those most worthy of general pursuit.
2. Those less worthy of general pursuit.

The objectives, under the general headings of aims, are given below. An explanation of the scoring system is essential to an adequate understanding of what has been done. The headings and Roman numerals, as mentioned before, refer to the objectives listed under

those headings earlier in this appendix (pp. 527-533). The numbers in parentheses refer respectively to the *score* and the *goals* favorably met. A perfect score is 4. There are *seven* goals of education that can be met (see ch. 2, p. 26). A rating (4, 7) is the best possible.

The scores were attained as follows: The four groups of criteria (Zool., Sociol., Psychol., and Trans.) were considered to have equal influence on the score. If the objective meets all the criteria within a single group, a score of one point is given. If it does not meet all the criteria within one group, a fractional score is arrived at by placing the number it does meet over the total number in the group. The total of these group scores is the first figure given in the parentheses. The second figure equals the total goals met.

In the event that once criterion is followed by a question mark, it is scored as if there were no question mark there. If two criteria in one group are question-marked, only one criterion is counted. The same method is used concerning goals.

Those most worthy of general pursuit are as follows:

1. *Skills and abilities aim*
I ($3\frac{4}{5}$, 6); II ($3\frac{3}{5}$, 6); III ($3\frac{3}{5}$, 6); IV ($3\frac{3}{5}$, 6); V, A, B, C, D, F (4, 6); V, E ($3\frac{11}{20}$, 6); V, G ($2\frac{32}{35}$, 6).
2. *Cultural aim*
I (4, 7); II (4, 6).
3. *Mental hygiene aim*
I (4, 7); (4, 6).
4. *Desirable habits aim*
I ($3\frac{11}{20}$, 7); II ($3\frac{1}{20}$, 6); III ($3\frac{4}{5}$, 7).
5. *Personality aim*
I ($2\frac{4}{5}$, 6); II (3, 6); III (3, 6); IV ($2\frac{4}{5}$, 7); V ($2\frac{4}{5}$, 6); VI ($2\frac{4}{5}$, 6); VII ($2\frac{4}{5}$, 6); VIII ($2\frac{4}{5}$, 6).
6. *Purely physical aim*
III ($2\frac{2}{5}$, 5); LV ($2\frac{3}{5}$, 5).
7. *Prestige aim*
II ($3\frac{1}{20}$, 6).
8. *Applied knowledge aim*
IV ($2\frac{3}{5}$, 5).
I ($2\frac{8}{35}$, 5); II ($2\frac{8}{35}$, 5).

Those less worthy of general pursuit include:

1. *Purely physical aim*
I ($2\frac{6}{25}$, 5); II ($2\frac{6}{25}$, 5); III ($2\frac{3}{5}$, 5); IV ($2\frac{3}{5}$, 5).
2. *Prestige aim*
I ($3\frac{1}{10}$, 4); III ($2\frac{3}{5}$, 3).

3. *Applied knowledge aim*I ($2\frac{2}{5}$, 3); II ($2\frac{2}{5}$, 3); III ($2\frac{2}{5}$, 5).

The above rating is based on the assumption that the criteria developed for each phase are of equal value. This assumption is arbitrarily made in the absence of any contrary evidence.

The requirements for each classification are:

1. A score of $2\frac{1}{2}$ or above and five or more goals met favorably.
2. A score of less than $2\frac{1}{2}$ or less than five goals met favorably.

These division lines are arbitrarily set. Actually there is no line of demarcation between the two classes.

SUMMARY

1. Criteria by which to evaluate physical education objectives have been presented for the fields of zoology, sociology, and psychology (including transfer).
2. One major criterion has been presented in the field of education supported by the seven major educational goals.
3. An inclusive list of student attainment objectives has been collected and organized.
4. These objectives have been subjected to various criteria and to the educational goals.
5. Each objective has been notated according to the criteria and goals that apply favorably or unfavorably to it. Those not applying have been omitted. Those to which the objective is contrary are preceded by a minus sign.
6. The objectives adjudged acceptable according to the criteria and goals are listed with their supporting evidence.
7. Those rejected, but approaching acceptability, are listed in a separate section.
8. Those definitely unacceptable are omitted.
9. The acceptable objectives are finally arbitrarily divided into two groups according to the plan of ranking stated above.

APPENDIX B

Standards in Athletics for Boys in Secondary Schools¹

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1. The program of athletics should be developed with due regard for the health and safety standards.

- (a) A health examination should be required previous to participation, preferably on a seasonal basis with an annual examination a minimum.
- (b) A physician should be present at all contests involving activities where the injury hazard is pronounced.
- (c) A contestant who has been ill or injured should be readmitted to participation only on the written recommendation of a physician.
- (d) A contestant upon returning to participation after illness or injury should be carefully observed, and if there is any doubt as to his condition he should immediately be referred to a physician.
- (e) The coach (faculty member in charge) should be competent in first aid and thoroughly versed in sports conditioning and training. It is also strongly recommended that all players be given basic instruction in first aid.
- (f) In case of head, neck, or spine injury or suspicion thereof, the player should be removed from play, placed at rest, and be given the immediate attention of a physician.
- (g) Every school should have a written policy regarding the responsibility for injury incurred in athletics, and this policy should be known to all participants, their parents, and other responsible adults. Arrangements should be made for obtaining and paying for medical and hospital care of injured participants, in accord with local policy.

¹ Joint Committee Report, "Standards in Athletics for Boys in Secondary Schools," *Journal of the American Association for Health, Physical Education, and Recreation* (September, 1951), p. 17.

- (h) Competition should take place only between teams of comparable ability, and playing seasons should be limited to reasonable duration.
- (i) The best obtainable protective equipment should be provided for all participants, and special attention should be given to proper fitting of such equipment.
- (j) No preseason games should be played until players are well drilled in fundamentals and have had a minimum of two weeks of physical conditioning.
- (k) Play fields should meet standard requirements for size of area, playing surfaces, and facilities for safety, and all reasonable precautions should be taken to prevent accidents.
- (l) Contests should be selected, and rules and lengths of playing periods should be such that they are not overtaxing the physical abilities of high school students.

2. Good citizenship must result from all coaching and from all inter-school competition. The education of the youth of the nation fails unless it creates the proper ideals and attitudes, both in the game and off the field.

- (a) The contribution of athletics to citizenship—indeed, to life itself—will be judged according to the contribution they make to fine living.
- (b) Athletics should contribute a feeling, on the part of the athlete, of personal worth, excellence in performance, self-respect, and desirable personal and social growth and development.
- (c) Educationally, winning is not the only important item. While the will to win within the rules of good sportsmanship is an important attribute to good citizenship, there is always a tendency to overdo the importance of winning in athletics. Other important contributions are those desirable changes made in skills, habits, and attitudes of the participants.
- (d) Athletics are responsible jointly with education for establishing among boys and girls those standards of behavior that represent the best in good citizenship. Athletics must contribute to those virtues which are socially sound for a democracy, such as truthfulness, fair play, honesty, modesty, give and take, courtesy, self-discipline, courage, generosity, self-restraint, and loyalty to team, state, and nation.

3. The ten cardinal athletic principles are accepted as expressing the policies of our organization, and it is urged that these be displayed in the literature of our organizations.³ To be of maximum effectiveness, the athletic program will:

- (a) Be closely co-ordinated with the general instructional program and properly articulated with the other departments of the school.

- (b) Be such that the number of students accommodated and the educational aims achieved justify the use of tax funds for its support and also warrant the use of other sources of income.
- (c) Justify the time and attention which is given to the collection of "other sources of income" which will not interfere with the efficiency of the athletic program or of any other departments of the school.
- (d) Confine the school athletic activity to events which are sponsored and supervised by the proper school authorities so that any exploitation or improper use of prestige built up by school teams or members of such teams may be avoided.
- (e) Be planned in such a way as to result in opportunity for many individuals to explore a wide variety of sports and to set reasonable season limits for each listed sport.
- (f) Be controlled in such a way as to avoid the elements of professionalism and commercialism which tend to grow up in connection with widely publicized "bowl" contests, barnstorming trips, and interstate or intersectional contests which require excessive travel expense or loss of school time or which are claimed to be justified by educational travel values.
- (g) Be kept free from the type of contest which involves a gathering of so-called "all stars" from different schools to participate in contests which may be used as a gathering place for representatives of certain college or professional organizations who are interested in soliciting athletic talent for their teams.
- (h) Include educative exercises to reach all nonparticipating students and community followers of the school teams in order to insure a proper understanding and appreciation of the sports skills and of the need for adherence to principles of game ethics.
- (i) Encourage a balanced program of intramural activity in grades below the ninth to make it unnecessary to sponsor contests of a championship nature in these grades.
- (j) Engender respect for the rules and policies under which the school conducts its program.

4. All schools shall use reasonable care in avoiding any participation in a contact sport between participants of normal high school age and participants who are appreciably above or below normal high school age.

Senior high school competition should be limited to participation in games, meets, and tournaments between participants enrolled in grades 9 through 12. Junior high school competition should be limited to participation in games, meets, and tournaments between participants enrolled in grades 7 through 9. These games, meets, and tournaments should be approved and conducted by appropriate secondary school authorities.

- (a) All school personnel should utilize every precaution and procedure to assure competition in secondary school athletics on the basis of comparable parity.

- (b) A significant phase in the growth of a living organism is maturity. Wide differences in the maturity places in jeopardy the well-being of athletic competitors. School personnel should permit competition between teams composed of comparable maturity.
- (c) Certain stages of maturity can be distinguished and should be utilized as one of the bases for determining parity in athletic competition.
- (d) Outstanding features of adolescence are insecurity, awkwardness, and excessive competitiveness. One can adjust himself to these factors of environment only by becoming more mature, wiser, and more self-reliant. These are additional evidences that parents and school personnel should use protective procedures in setting up competition between individuals and groups of preadolescent and adolescent age.
- (e) A high school pupil or team should not compete with members of a college or university, a preparatory school, or other school which includes postgraduates on its teams, or against any independent team sponsored by an "outside" organization.
- (f) A junior high school pupil or team should not compete with members of a team representing a senior high school, elementary school, or an outside organization. This would not, however, exclude the participation of ninth-grade pupils as a member of a senior high school team if the ninth grade is under the administrative direction of the high school principal and if the other conditions stated above are met.
- (g) Appropriate secondary school authorities consist of legally certified teaching, supervisory, and administrative personnel directly under the superintendent of schools. These personnel should see that the items noted above are observed.

5. All schools shall fully observe and abide by the spirit and letter of established eligibility requirements which have been democratically developed by each of the state athletic associations.

6. Each state athletic association should attempt to secure the co-operation which would provide a plan of continuous eligibility from high schools to college.

7. For competition in which only one state is involved, no school shall participate in a meet or tournament involving more than two schools unless such contest has been approved by its state high school association or its delegated constituent or allied divisions.

8. The use of school facilities or members of the school staff shall not be permitted in connection with any postseason or all-star contest unless such contest has been sanctioned by the state athletic association.

9. A school shall not permit any employee or official to encourage or collaborate in any negotiations which may lead a high school athlete to lose his eligibility through the signing of a professional contract.

10. The solicitation of athletes through tryouts and competitive bidding by colleges and universities is unethical, unprofessional, and psychologically harmful. It destroys the amateur nature of athletics, tends to commercialize the individual and the program, promotes the use of athletic skill for gain, and takes an unfair and unjust advantage of competitors.

11. In all interstate athletic contests, each athlete shall compete under eligibility rules which are at least as restrictive as those adopted by the state high school athletic association of his state, except in the case of nonmember schools which are not eligible for membership in their state associations.

12. No school shall compete in any of the following contests unless such contest has been sanctioned by each of the interested state high school athletic associations through the National Federation:

- (a) Any interstate tournament or meet in which three or more schools participate.
- (b) Any interstate two-school contest which involves a round trip exceeding 600 miles.
- (c) Any interstate two-school contest (regardless of the distance to be traveled) which is sponsored by an individual or an organization other than a member high school.

13. No basketball tournament which is purported to be for interstate high school championship shall be sanctioned, and no basketball tournament involving schools of more than one state shall be sanctioned unless the tournament is purely community in character.

14. No contest which is purported to be for a national high school championship in any sport shall be sanctioned.

APPENDIX C

Wisconsin Interscholastic Athletic Association Medical Allowances¹

MEDICAL ALLOWANCES

Principal sum (not to exceed)	\$500.00
Entire sight of one eye if irrevocably lost	200.00
Partial loss of one eye (seriously handicapped)	100.00
Concussion (only if loss of consciousness occurs)	20.00
<i>Injury to viscus, requiring surgery</i>	150.00
Suture of laceration	5.00
Lacerations (not requiring sutures)	5.00
Tetanus antitoxin	3.00
Sprains (Joints of hands, feet, back, wrist, shoulder, ankle, knee, elbow)	10.00
Abrasion	5.00
Aspirations (limit 3)	5.00
<i>Fluoroscope examination</i>	3.00
Medical attendance	12.00
Surgery	25.00
Hospital benefit	96.00
Serious injury provision (limit)	500.00

APPENDIX C

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Requiring one surface plastic restoration	4.00
Requiring two surface plastic restoration	6.00
Requiring one surface silicate cement restoration	4.00
Requiring one surface gold restoration	12.00
Requiring two surface gold restoration	15.00
Requiring three surface gold restoration	18.00
Requiring a $\frac{3}{4}$ gold crown restoration	18.00
Requiring a gold crown	18.00
Requiring an acrylic or porcelain jacket crown	40.00
Requiring Kadon crown or jacket or chrome crown	12.00
Porcelain Davis crown with post	15.00
Open-face crown	15.00
Requiring a crown with veneer window	25.00
Loss of one or more anterior or posterior teeth requiring bridgework, per tooth	15.00
Maximum allowance	90.00
Injury requiring an upper or lower partial denture acrylic, or acrylic and metal with clasps, \$15.00 per tooth, each for clasps, maximum allowance	80.00
Injury to tooth requiring pulp removal and root filling	15.00
Repairing dentures or partial dentures broken but no teeth involved	10.00
Replacing broken teeth on dentures or partial dentures:	
First tooth	10.00
Each additional tooth	2.00
Adding teeth and denture or partial denture to replace extracted natural teeth:	
First tooth	15.00
Each additional tooth	2.00
Extraction	3.00
Maximum for chipped teeth for one accident	10.00
Maximum for one dental injury	90.00
Fractures:	
Simple fractures of superior or inferior maxilla not requiring wiring or splints, including X ray and care	37.50
Simple fractures of superior or inferior maxilla, reduction, fixation, postoperative care, and including X rays	75.00
Compound or comminuted fractures of superior or inferior maxilla, reduction, fixation, postoperative care, and including X rays	100.00
X rays:	
First X ray	2.00
Additional X rays (not to exceed 4)	1.00

ALLOWANCES FOR FRACTURES AND DISLOCATIONS

	FRACTURES			DISLOCATIONS			X ray Allowance
	No Reduction	Closed Reduction	Open Reduction	No Reduction	Closed Reduction	Open Reduction	
Ankle joint	\$ 25.00	\$ 60.00	\$ 90.00	\$ 10.00	\$ 35.00	\$ 100.00	\$ 5.00
Clavicle	15.00	25.00	50.00	—	—	—	5.00
Inner joint	—	—	—	25.00	25.00	75.00	5.00
Lateral joint	—	—	—	15.00	50.00	75.00	5.00
Coccyx	15.00	25.00	50.00	—	—	—	10.00
Collar: Radius, Ulna	20.00	50.00	75.00	—	—	—	5.00
Elbow:							
T. Fracture	35.00	75.00	100.00	—	35.00	—	5.00
Medial Epicondyle	20.00	35.00	75.00	—	—	—	5.00
Lateral condyle	20.00	35.00	75.00	—	—	—	5.00
Radial Head	20.00	35.00	75.00	—	—	—	10.00
Femur (shaft)	40.00	100.00	135.00	—	—	—	5.00
Forearm:							
Radius	20.00	50.00	75.00	—	—	—	5.00
Ulna (shaft)	20.00	50.00	75.00	—	—	—	5.00
Radius and Ulna shaft	30.00	60.00	100.00	—	—	—	5.00
Hip:							
Intertrochanteria	40.00	100.00	150.00	—	60.00	75.00	10.00
Intercapsular	40.00	100.00	150.00	—	60.00	75.00	10.00
Humerus	35.00	50.00	75.00	—	—	—	5.00
Maxilla: inferior, superior, zygomatic	32.50	70.00	95.00	—	10.00	—	10.00
Metatarsal:							
Single	10.00	20.00	30.00	—	25.00	40.00	5.00
Each additional	3.00	5.00	12.50	—	20.00	30.00	—
Nose	10.00	25.00	75.00	—	—	—	5.00

	\$ 20.00	\$ 25.00	\$110.00	—	—	—	—	—	\$ 5.00
Patella	—	—	—	15.00	25.00	—	100.00	—	5.00
Semilunar cartilage	30.00	60.00	100.00	—	60.00	—	150.00	—	10.00
Pelvis	15.00	15.00	—	—	—	—	—	—	10.00
Rib (one or more)	15.00	50.00	100.00	—	—	—	75.00	—	10.00
Scapula	—	—	—	—	25.00	—	—	—	10.00
Shoulder	—	50.00	100.00	—	—	—	—	—	10.00
Skull and/or cerebral hemorrhage	25.00	75.00	150.00	25.00	75.00	—	150.00	—	10.00
Skull (no cerebral damage)	30.00	25.00	50.00	—	—	—	—	—	5.00
Spine	10.00	50.00	60.00	—	—	—	—	—	—
Sternum	25.00	50.00	75.00	—	35.00	—	75.00	—	5.00
Tarsal ocalais	20.00	50.00	110.00	—	—	—	—	—	5.00
Tarsal (excluding ocalais)	30.00	75.00	—	—	—	—	—	—	—
Tibia (involving knee joint)	—	—	—	—	—	—	—	—	—
Toe:	10.00	15.00	15.00	—	—	—	10.00	—	10.00
Great	—	—	—	—	—	—	—	—	—
Other	3.00	5.00	5.00	—	5.00	—	—	—	—
Each additional	10.00	10.00	—	—	—	—	—	—	—
Transverse process	—	—	—	—	—	—	—	—	—
Wrist and hand:	25.00	25.00	—	—	35.00	—	75.00	—	5.00
Carpal	10.00	20.00	25.00	—	15.00	—	25.00	—	5.00
Metacarpal (single)	3.00	5.00	10.00	—	10.00	—	10.00	—	—
Each additional	5.00	15.00	25.00	—	5.00	—	15.00	—	5.00
Finger	3.00	5.00	10.00	—	5.00	—	10.00	—	—
Each additional	—	—	—	—	—	—	—	—	—

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